

# How to Enhance the Effectiveness of Online Review Platforms

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## *Abstract*

*The large volume of contents on online review platforms can cognitively overload consumers. It's therefore crucial for online review platforms to present information cues and features to help consumers make effective assessments of online reviews faster. Currently, major deficiencies in the design of major online review platforms hinder this objective. To address this deficiency, findings of our published meta-analysis of online review literature specify the most influential information cues and their order of importance to help consumers make better decisions. In this article, we elaborate on the practical implications of our findings for designing more effective online review platforms.*

## **Introduction**

What's the first thing you do when you want to try a new restaurant? Or book a hotel, hire a contractor or find the best physician? You might ask friends or family, but chances are you're more likely to search on Yelp, TripAdvisor, Angie's List or Healthgrades. This is becoming a new normal: 82% of consumers state that their purchase decisions have been directly influenced by online reviews with online review platforms, such as Yelp and TripAdvisor, being at the epicenter of online review searches.<sup>1</sup>

While review platforms are the go-to place for consumers and sellers to learn about the pros and cons of products and services, an unforeseen consequence has emerged. The sheer number of online reviews has created a processing problem for consumers as they search online for information. This ever-increasing volume leads to a competition for their attention span and

time, arguably the society's most scarce and valuable resources.<sup>2</sup> As a result, consumers are enticed to make faster decisions about whether a review is helpful. It's therefore crucial for online review platforms to present information cues and features to help consumers make effective assessments of online reviews.

**Table 1.** Influential Information Cues Toward the Adoption of an Online Review and their Order of Importance

Information Cue	Definition	Importance Ranking
Credibility of an Online Review	Extent to which an online review is believable, trustworthy, valid, and factual. <sup>3</sup>	1
Source Trustworthiness	Extent to which a reviewer can be trusted for providing an accurate and truthful version of reality in an online review. <sup>4</sup>	2
Consumer Involvement	The extent of a consumer's interest in the content of an online review. <sup>5</sup>	3
Online Review Consistency	The extent to which an online review shares similar rating and arguments with other online reviews. <sup>6</sup>	4
Source Expertise	The extent of a reviewer's relevant expertise in the subject of an online review. <sup>7</sup>	5
Source Social Connectedness	The number of contacts/followers/friends a reviewer has on an online review platform. <sup>8</sup>	6
Quality of an Online Review	Extent to which an online review is meaningful, easy to understand, rationale, timely, relevant, and comprehensive. <sup>9</sup>	7
Framing of an Online Review	The overall valence --positivity or negativity-- of an online review, mostly represented by star ratings. <sup>10</sup>	8

Despite this, we see significant deficiencies on major online review platforms. These indicate a lack of empirically researched guidelines for identifying the right information cues, and their order of relative importance. To fill this gap, we performed a quantitative meta-analysis of 87 prior online review studies, comprising 105,318 cases of online review assessments by consumers.<sup>11</sup> Meta-analysis is a popular method for reviewing and quantitatively sensitizing the findings in a domain of scientific literature.<sup>12</sup> We drew on a particular meta-analysis method, called two-stage meta-analytic structural equation modeling (TSSEM) as our methodology. TSSEM enabled us to statistically pool the effect sizes from prior empirical online review studies to estimate a pooled covariance matrix of effects for different information cues. These pooled effect sizes were then used to statistically test a comprehensive theoretical model of information cues affecting the adoption of an online review. The empirically validated structural model (output of TSSEM) enabled us to estimate the total effects of information

## **How to Enhance the Effectiveness of Online Review Platforms**

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cues on consumers' adoption of an online reviews, which is the basis for calculating the relative importance of the information cues.<sup>13</sup> Therefore, findings of TSSEM (in Table 1) show the most influential information cues and their order of importance in leading consumers to adopt an online review (use what they read to influence what they'll buy). These results can be used as guidelines to design more effective review platforms.

### **How Consumers Assess and Adopt an Online Review**

To improve the effectiveness of their websites, online review platforms need to consider how consumers assess then adopt an online review, and which information cues help them in the process. Not all information cues exert influence in the same way, and we can classify them into two types: systematic cues and heuristic cues.<sup>14</sup> Systematic cues are related to an online review's content.<sup>15</sup> These information cues enable consumers make an in-depth and more thorough assessment of an online review, if they are willing (for example, when they have the time or making a big purchase) and able (for example, if they are critical thinkers). Our study identified the *quality*<sup>16</sup> and *credibility*<sup>17</sup> of the online review content as two influential systematic cues.<sup>18</sup>

Heuristic cues can also influence how consumers assess an online review. These cues entail surface features of an online review as well as the characteristics of its source (who posted the review).<sup>19</sup> Unlike systematic cues that require deeper processing of the content, heuristic cues are based on simple evaluative thoughts, such as "credible sources provide high-quality knowledge."<sup>20</sup> So, while heuristic cues are faster and easier to process, they're also more likely to lead consumers to make rash and simplistic assessments.<sup>21</sup> In our meta-analysis, we identified five heuristic cues that consumers rely on: three are related to the source of an online review, specifically *source trustworthiness*,<sup>22</sup> *source expertise*,<sup>23</sup> and *source social connectedness*;<sup>24</sup> and the other two, *online review framing*<sup>25</sup> and *online review consistency*<sup>26</sup> are related to surface features of an online review.

While systemic cues of quality and credibility of an online review content directly influence consumers' assessments, simpler heuristic cues will influence their decisions by *biasing* their systematic cues, such as "sources with a lot of followers provide credible online reviews." The bias effects of heuristic cues – about the reviewer, review framing and consistency – are strong enough to make these almost twice *more influential* than systematic cues. For example, the trustworthiness and expertise or the number of followers the source has on an online review platform play a more important role in influencing consumer decisions than the quality and credibility of the online review itself. This is partly because online review platforms lack the

information cues and features that help consumers assess the quality and credibility of a review's content.

### **Designing a Better Online Review Platform**

Taking our empirical findings as the benchmark, we assessed the information cues used on five of the most popular online review platforms: Yelp, Google Reviews, TripAdvisor, Facebook Page Recommendations, and Amazon. Our findings show inconsistencies and deficiencies. While Amazon and Yelp help consumers assess the credibility of a review respectively via “Verified Purchase” tag, which confirms the reviewer bought the product, and “check-in” tag, which confirms on Yelp that the reviewer has checked in the restaurant, we did not find such information cues on the other platforms. Yelp and TripAdvisor provide information about source expertise, but Facebook does not. Even the order (visual hierarchies) in which information cues are presented on these platforms is inconsistent; this alters their importance for consumers as they visit different platforms. Based on our findings, the following are guidelines and steps online review platforms can take to improve their design.

### **Improving Assessment of Credibility and Quality of Online Reviews**

Most of the information cues on online review platforms favor heuristic cues, such as the characteristics of the source, while there are barely any information cues in support of the quality and credibility of online review's content. By favoring heuristic cues, online review platforms can arguably be driving consumers to make rash and simplistic decisions. This shortfall is particularly worrisome when fake and untruthful (solicited) online reviews have become an increasingly major problem for everyone involved – consumers, businesses, and the online review platforms themselves. Integrating cues, such as the “Verified Purchase” tag on Amazon and “Verified Buyer” tag on Consumeraffairs.com, are good practices that help consumers assess the credibility of an online review content. Likewise, services such as Fakespot.com and Yelp Recommendation Software that search and analyze fake and solicited content, can help identify reviews that are untruthful and suspicious.

Platforms can also facilitate consumers' assessment of the quality of online reviews by providing them with a structured review-writing format. For example, by asking to list the “pros” and “cons” of a product separately, such as on Glassdoor.com, and including a bottom-line recommendation, the quality of an online review can be assessed more easily. Consumers could also be encouraged to provide explanations and evidence, such as photos, in support of their reviews.

## **How to Enhance the Effectiveness of Online Review Platforms**

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Given that improving consumers' *involvement* with an online review can increase their ability and willingness to assess the quality and credibility of online reviews, platforms can implement features that help consumers find online reviews that are relevant to them. For example, if a consumer cares a lot about a restaurant ambience, reviews that describe this will increase his/her involvement. Likewise, Amazon's annotated tags features and TripAdvisor's search functionalities are good practices that can help consumers find online reviews that better match their interests.

Enhancing information cues and features that facilitate better assessment of the quality and credibility of online reviews can reduce consumers' sole reliance on heuristic cues. This will in turn minimize rash and simplistic decisions that are often the culprit when consumers fall victim to fake and solicited reviews.

### **Improving Heuristic Cues related to Online Reviews**

Important heuristic cues, such as source trustworthiness, source expertise, source social connectedness, and online review consistency, should also be implemented on review platforms. For example, reviewers' photos, names, and locations are among the most common information cues provided to assess source trustworthiness. However, allowing reviewers to use pseudo photos, names, and locations without any visible identity verification (such as on Google Reviews) makes it harder to trust a reviewer. But platforms are in a position to add features that help consumers assess source trustworthiness. The "Verified Reviewer" tag on Consumeraffairs.com, for instance, verifies the real reviewer identity from bots and fake accounts. Reviewfraud.org is another service that exposes accounts which are faking reviews and deceiving the public.

Information cues about source expertise and social connectedness are missing from many online review platforms such as Facebook Page Recommendations. To rectify this, one useful information cue would be a badge, such as Yelp's "Elite Squad" and Amazon's "Top Contributor." This helps consumers assess a reviewer's expertise. Review consistency is also important. A measure of online review consistency that shows the extent to which the arguments in a review are consistent with the arguments in other reviews should also be implemented. The extent of the consistency of an online review with other reviews can help consumers assess the credibility of the online review.

### Online Review Platforms are a Tractor Beam for Consumers and Businesses

Online reviews are here to stay. They're one of the most popular sources of product/service information and, as Forbes describes, are a "tractor beam" for consumers and businesses.<sup>27</sup> Our meta-analysis of the 105,318 published cases reveals the importance of eight information cues depicted in Table 1 that should be considered in designing review platforms. Furthermore, considering the significance of each cue for the adoption of online reviews, the visual hierarchy of depicting each of the eight cues on online review platforms (websites) should be based on the ranking of their relative importance shown in Table 1. The visual hierarchy of a webpage refers to the order (rank) in which contents on the webpage are viewed by a consumer. Given that people can only process one visual stimulus at a time, visual hierarchy in viewing online contents results in a sequential cognitive activity. Therefore, visual hierarchy of the eight information cues on a webpage according to their importance shown in Table 1 enable consumers to pay more attention to the cues that matter more for their decision to adopt the online review. By following our proposed guidelines, online review platforms can improve how consumers make buying decisions and help reduce their risk of falling victim to untruthful and fake reviews. Using these findings, platforms can re-think how to present online reviews and their pertinent information cues to ensure they remain an influential and trusted source of information for consumers and sellers.

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## **How to Enhance the Effectiveness of Online Review Platforms**

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