The Role of Online Ratings and Reviews in Consumer Decision-Making: Insights from Behavioral Economic Perspectives

Chenxi Zhang

ESCP Business School, Paris, 75000, France

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Abstract: With the rapid development of the Internet and e-commerce platforms, online ratings and reviews have become an important reference point for consumer decision-making, revolutionizing the traditional methods adopted by consumers. They reduce information asymmetry, encourage trusting consumer buying behavior, and help the consumers to make more informed purchasing decisions-especially in the retail, food, and travel sectors. This paper is an in-depth literature review that assesses current writings on online ratings and reviews shaping and influencing trends in customer behavior. After assessing their quality, quantity, and consistency, the paper recognizes their emotional and social power, as well as the potency of negative feedback; in addition, there is a dynamic interaction between these ratings and extensive detailed reviews. In addition, this paper this paper suggests that businesses should encourage the writing of bottom-up, detailed, and real reviews. They should also ensure positive and transparent feedback to negative feedback so that the brand's credibility and consumer loyalty will be improved. As for consumers, critical thinking should be maintained when using online reviews and comparative understanding from multiple sources should be brought in. Consumers should be aware of polarized reviews and check the relevance and reliability of reviews based on their needs and reality.

1 INTRODUCTION

1.1 Background

In the current era of rapid Internet development, the Internet community possesses a vast potential for the economic market. Consequently, a multitude of e-commerce platforms are emerging, thereby increasing consumers' propensity to engage in online shopping.

Online consumption, when the real item is not visible, is frequently a consideration that consumers consider when making selections, following a sequence of mental selection activities prior to making their final choice, in contrast to offline consumption. The product's reputation is one of the most crucial purchasing reference elements, and online reviews are the primary source of online reputation. Compared with merchants' graphic introductions, online reviews posted by consumers who have purchased products can reflect more authentic and comprehensive information (Chevalier & Mayzlin, 2006), assisting potential consumers in mitigating risks and promoting consumption decisions. These product opinions, as a new form of electronic word-of-mouth/mouse (EOM), have become an indispensable tool for consumers, who increasingly rely on the reviews of other consumers to make online purchasing decisions (Ludwig et al., 2013), and therefore for retailers looking to attract and retain consumers (Pan & Zhang, 2011).

1.2 Significance of the Research

Online ratings and reviews represent one of the major means of information dissemination in the digital economy, while having a considerable impact on consumer behavior and market efficiency. Online reviews improve consumers in perceiving the qualities of goods and services due to reduced information asymmetry. This mechanism is particularly critical in high-information-demand domains such as retail, food, and travel. For example, consumers are unable to fully understand the quality of products through prior assessments when purchasing experiential goods, while online reviews act as a substitute signal that significantly reduces decision uncertainty. In addition, the dynamic feedback mechanism of online reviews provides

firms with real information about consumer preferences and helps them adjust their strategies to meet market demand. However, the actual effectiveness of this mechanism is constrained by various factors such as the credibility of the reviews, information overload, and emotional bias, which provides a wide scope for related research.

2 OVERVIEW OF ONLINE RATINGS AND REVIEWS

2.1 Definition and Type

Online ratings and reviews are a form of user evaluation of a product, service, or experience that not only acts as an information source but also provides decision-making support for potential buyers and feedback to businesses. These two types of evaluations can be further classified into: quantitative ratings and textual reviews.

Numeric ratings are usually presented in an intuitive manner, such as five stars, ten point system, percentage score, and are a quick assessment of a user's overall satisfaction with a product or service. This simplified presentation facilitates quick access to overall rating information for the user, but may therefore obscure the specific views and informational details of the evaluator, thus limiting its usefulness in conveying in-depth information.

Textual reviews are detailed assessments provided by users in written, graphic, or audiovisual forms. These can convey much more emotional expression, provide more detailed information, and supply specific details, thus overcoming the limitations of the brevity of e-ratings (Pan & Zhang, 2011). For example, textual reviews may include user descriptions of specific product features, emotions about the purchasing and consumption experiences, and recommendations or criticisms. Both corporate performance improvement tactics and user decision-making processes greatly benefit from the availability of comprehensive information. In addition, text-based analysis is specifically affected by linguistic characteristics, personal preferences, and context factors, thus showing high variability (Ludwig et al., 2013). The emotional color of the language (e.g., positive, negative, neutral) may directly affect the user's willingness to buy. For example, positive emotions are more likely to promote consumption, while negative emotions may lead to hesitation or abandonment. At the same time, words that match users' language habits or preferences, or that have a high degree of similarity and resonance, are more likely to stimulate immediate consumption behavior.

2.2 Key Platforms and Channels for Online Ratings and Reviews

The dissemination of and access to online ratings and reviews exists primarily on a diverse range of platforms and channels that have played a key role in the development of user-generated content (UGC) (O'Connor, 2010). Platforms provide an important channel for consumers to express their opinions and obtain information, as well as a key tool for merchants to understand user needs and feedback. It has been demonstrated that having user ratings on a website enhances users' opinions of its usability and social presence (Kumar & Benbasat, 2006). Below are some common platforms and their comment characteristics:

2.2.1 Amazon

As a leading e-commerce platform internationally, Amazon's system for user reviews has attracted significant scholarly interest and is seen as a model within the industry (Mudambi & Schuff, 2010). In addition to thorough written evaluations, this review system includes star ratings and a voting element called "Helpful Reviews" that highlights contributions of the highest caliber. Amazon also lets customers post videos and pictures, which is a multimedia format that makes reviews more reliable and educational. Research has shown that Amazon reviews influence individual consumer decisions, and also that Amazon drives sales by aggregating review data (Chevalier & Mayzlin, 2006).

2.2.2 Taobao

Taobao, one of China's biggest e-commerce sites, combines text-based evaluations with digital ratings to give customers thorough information about products and services. Consumers can rate on a five-point scale in terms of the accuracy of product descriptions, the seller's service attitude, the timeliness of logistics, and other dimensions, and assess satisfaction from multiple perspectives separately. Customers may simultaneously utilize text, images, and even videos to provide detailed descriptions of their purchase and usage experience. These evaluations serve as a reliable resource for prospective buyers in addition to assisting other users in understanding the product's particular performance. After the initial assessment, customers

may submit "follow-up reviews" on Taobao to provide input on the product's long-term use. This function is especially useful for evaluating durable items or services.

2.2.3 TripAdvisor

TripAdvisor is an important reference platform for travelers around the world, focusing on reviews of travel-related services. It provides star ratings and detailed text reviews of hotels, restaurants, attractions, etc. (Gretzel, et al., 2007). TripAdvisor's Travelers' Choice ratings integrate user reviews and data to provide authoritative reference information for potential consumers. TripAdvisor's Travelers' Choice ratings integrate user review data to provide authoritative reference information for potential consumers. In addition, the platform allows users to upload pictures to show the travel experience from multiple perspectives, which enhances the authenticity and persuasiveness of the reviews.

2.2.4 Social Media Platforms

Social media (e.g., Facebook, Instagram, Twitter) are emerging as another important channel for consumers to express their opinions. Reviews on these platforms come in various forms, including text, pictures, videos, etc. The content spreads quickly and covers a wide range of areas, and at the same time, it may contain promotional information and false information, and these reviews can easily affect brand image and sales.

2.3 Popularity and Influence of Online Shopping

In the contemporary era of accelerated Internet development, the Internet community harbors immense potential for the economic market. Consequently, a multitude of e-commerce platforms are emerging, thereby increasing consumers' propensity to engage in online shopping.

Online consumption, characterized by the absence of the tangible product, frequently involves a series of cognitive selection processes preceding the consumer's final decision, in contrast to offline consumption. Product reputation is one of the most important factors affecting people's purchasing decisions, while online reviews are the primary source of information about the reputation of a product. It has been argued that online reviews are more authentic and comprehensive in disseminating information about a product than any graphic

introduction by the merchant (Chevalier & Mayzlin, 2006; Floyd et al., 2014)). These reviews are really important to potential consumers in risk mitigation and further consumption decision-making.

3 THE IMPACT OF ONLINE RATINGS AND REVIEWS ON CONSUMERS

3.1 Role in Decision-Making Process

In situations where consumers are bombarded with too much information regarding a product or service, they often find it hard to make a choice due to the numerous options available. Online ratings are direct and comprehensive measures that can help consumers narrow down their choices by giving them an instant overview of a product's overall quality (Chevalier & Mayzlin, 2006). Online reviews and ratings play a critical role in several steps of the consumer decision-making process, especially for experiential products and services, as well as for unfamiliar products. The number of reviews and ratings and the quality of the content in such reviews can significantly influence the choices of consumers in their choice processes. A high rating in a continuous manner can build trust among consumers for a product. At the same time, detailed textual comments could help consumers understand how a product works and how it is to be used in more depth, offering information that is not conveyed through numerical ratings . In Mudambi and Schuff's study, they used 1,608 online reviews on Amazon.com since September 2006, with products mainly in the search category and experiential products, in order to explore what factors influence the usefulness of reviews (Chevalier & Mayzlin, 2006). The Helpful Votes/Total Votes of the reviews were used as the dependent variable to measure the extent to which the reviews helped consumers in their decision making. The major independent variables were review depth, measured as the number of words in each review; rating extremity, according to the stars rating of the reviews—hence, especially focused on extreme ratings of 1 and 5 stars—and product type—searchable or experiential.The effects of the above factors on the usefulness of reviews were investigated through multiple linear regression analyses, and interaction terms were introduced to test the moderating effect of product type on these relationships. The results showed that the more detailed the review, the more useful it was; that rating extremity negatively affected the usefulness of

search-based products but not experience-based products; and that product type moderated the effect of review usefulness.

3.2 Emotional and Social Impact

The influence of online ratings and reviews goes beyond just influencing the rational decision-making processes of consumers; they also have emotional and social impacts. First, as reviews have the power to significantly impact customers' perceptions and subsequent decision-making behaviors, it is crucial that they have emotional content and expression, particularly when such evaluations evoke either positive or negative feelings. Reviews with high emotional content can evoke strong empathy, thus increasing their persuasiveness and credibility. This is especially true when consumers do not have enough time or interest to analyze them in depth.

On a social level, online reviews have significant social impact as a form of user-generated content. The existence of reviews informs consumers, and by conveying the usage experiences of others, consumers can feel some form of social support (Chevalier & Mayzlin, 2006). In addition, consumers also tend to follow group preferences or trends, and the herd effect can lead to a tendency to follow the majority opinion when faced with a large number of consistent reviews.

However, emotional and social influences can also introduce bias. For example, extreme reviews (e.g., over-exaggerated positive or negative comments) can be misleading to consumers, especially if they are unable to verify the source of the information, and they tend to repeat previous comments and ignore their true feelings. Exaggerated reviews inflate both the benefits and the drawbacks of a product or service, thus distorting consumers' objective judgment and causing them to make biased decisions. For instance, overly positive reviews may lead consumers to buy products that are inappropriate for them. On the other hand, very negative reviews may prevent consumers from considering better alternatives. Moreover, individuals influenced by such extreme reviews are probably going to repeat or mimic others' opinions without thinking about their own real experiences. Such a phenomenon not only decreases the variety of user-generated content but also amplifies the influence of extreme reviews.

3.3 The Impact of Negative Reviews and Relative Response Measures

Consumer decisions and brand perceptions are greatly influenced by negative evaluations, which can have a greater and more enduring effect than favorable reviews. Because negative feedback is frequently regarded as the earliest indication of a possible risk, people are more sensitive to it than to good information (Baumeister et al., 2001). Consumers trust negative reviews in the online environment, which they find more truthful and credible, especially when it has specific facts or personal experience (Lee & Youn, 2009). The trust may influence consumers' purchase intentions further and even change the general impression of the brand.

The approach that a company takes in its response is very important when dealing with negative reviews. For example, publicly acknowledging the problem, explaining it in detail, or offering a solution not only eases the concern of the dissatisfied consumer but also tells other potential customers that the brand is accountable and shows respect for customer experience. The constructive and specific responses are more likely to create consumer trust and turn negative experiences into positive memories, which benefits the relationship duration between consumers and brands (Weitzl & Hutzinger, 2017). On the other hand, if a brand evades responsibility or gives a formalized and impersonal response, it may further outrage the consumers; besides, inappropriate or careless handling of feedback may hurt the reputation of the brand.

4 THE IMPACT OF ONLINE RATINGS AND REVIEWS ON CONSUMERS

4.1 Number of Reviews

The number of reviews plays a key role in building consumer trust and increasing purchase intent as an important reference metric for consumer decision-making. A large number of reviews are often interpreted by consumers as a sign of high usage or discussion. When the number of reviews for a product or service is high, consumers tend to believe that the product has received a lot of attention and is a "hot product", thus increasing their confidence in its trustworthiness and quality, or generating curiosity to spend money on it. For example, given a choice between two products that have similar ratings, the

product with more reviews is often chosen because of a signal it sends for being trustworthy and safe. However, the review count effect is not linear; it has been shown in many studies that the incremental benefit of increasing the quantity of reviews decreases once past a certain point. For example, in the study of Dellarocas et al., the number of reviews of different products on e-commerce platforms and their relationship with sales were collected to explore how the number of reviews affects consumers' trust and purchase intention (Dellarocas et al., 2007). The strength of the association between the number of reviews and consumers' purchase intention is also compared through statistical analysis to verify whether the incremental benefit of the number of reviews begins to diminish after reaching a certain threshold. However, the number of reviews alone may not be enough to make a correct judgment of the product, especially when the reviews are many but repetitive or irrelevant, or when the product is being pushed by a seller or advertisers. In such circumstances, misleading or distracting reviews might be of little help in the consumer's decision-making and may even create confusion.

4.2 Quality of Reviews

Review quality usually has a more direct impact on consumer purchase intent than review quantity. High-quality reviews usually contain specific details, product images, and real-world experiences that help consumers judge whether the product really corresponds to the sales description and whether it will satisfy their actual needs. For example, in the case of high-risk or experiential products, detailed reviews can provide specialized information that consumers need in order to reduce uncertainty and gain trust. Moreover, the effectiveness of reviews depends on the language used because in high-quality reviews, the emotions and information are conveyed much better and hence offer a significant influence on the consumers.

4.3 Matching Between Ratings and Reviews

The alignment of ratings, with written reviews can greatly influence how consumers perceive and decide about products according to research findings. Showing that when ratings and review content aligns well together it tends to result in reliable product assessments by consumers as opposed to when theres a discrepancy, between the two which could cause confusion or uncertainty. Consumers may lose trust

in ratings if they are high. The reviews lack depth or are too simple. On the hand they might still decide to buy a product with ratings if the reviews are detailed and convincing (Ludwig et al., 2013). Therefore consumers tend to use both ratings and reviews together to get a picture before making a decision.

Examples include two studies by Nazlan, Nadia & Tanford, Sarah & Montgomery, Rhonda. (2018). The first study used a 2×3 experimental design to assess the impact of review order (positive or negative preference) and review type (text + ratings, text, ratings) on consumer decision-making with a sample of 210 diverse adult respondents. The results obtained are that the order of positive and negative reviews first does not significantly affect the restaurant's evaluation and recommendation intention. Reviews that included verbal descriptions and ratings had a greater impact on restaurant evaluation and recommendation intentions than reviews that used either verbal descriptions or ratings alone. The impact of negative reviews on consumer decisions is stronger than that of positive reviews, and the impact of negative reviews goes beyond the impact of review order. The limitations of this study are that the sample is predominantly middle-aged, which does not reflect the behavioral characteristics of consumers of all ages; the simulation scenario used in this study may lack the complexity of the actual online review environment, which does not adequately reflect consumers' real decision-making behaviors; and the number of reviews is insufficient, and no significant impact was observed. It is recommended to enhance the realism of the experimental scenario, expand the age distribution of the sample, and optimize the design of the review sequence to make it closer to the actual situation. The second study used a $2 \times 2 \times 2$ experimental design to analyze the effects of rating format (numeric vs. star ratings), the presence or absence of pictures, and review sentiment (positive vs. negative) on consumer choices, with a sample of 260 U.S. college students. The results show that when the review is positive, the review with a picture increases the probability of selecting the target menu item more than the review without a picture. However, in the negative reviews, pictures did not significantly affect the choice. In terms of rating format, the combination of the numerical rating and the picture situation improved the probability of selecting the target menu item, while the star rating had no significant effect. This study had a limited sample of college students, which is unlikely to be representative of any broad constituency of consumers. While photographs prove to be more effective in positive reviews, it is not clear why they

do not work in negative reviews. The menu and review scenarios modeled here are far less complex compared to any real online shopping scenario. It is recommended that future research expand the sample to include subjects from different age groups and occupational backgrounds and develop more sophisticated experimental scenarios to make findings relevant. Generality of the findings can also be established by replication in other domains of consumer activities, such as online shopping, travel choices, or technology product evaluation.

5 CONCLUSION

5.1 Summary

The research once again underpins that online ratings and reviews have become a factor of vital significance for the processes of making a choice by consumers and market dynamics in general. Among the key findings, the findings indicate that review volume is critical to establish consumer confidence, quality reviews decrease the uncertainty of a choice, and inconformity between numerical ratings and written commentary shapes consumer perceptions. Moreover, the emotional and social character of reviews-one may especially mention the greater power of negative feedback-testify to the complex interrelationship between consumer psychology and online feedback systems.

5.2 Recommendations

Managing and engaging with customer reviews can boost trust and loyalty, for businesses. Integrating understanding replies to feedback can transform unhappy clients into loyal supporters and demonstrate responsibility to prospective consumers. Firms should also prioritize encouraging genuine reviews to elevate their usefulness and reliability.

As customers go through reviews it is important for them to be discerning and thoughtful, in their assessments of the feedback they come across on the internet platforms. This involves being aware of any prejudices, in negative reviews and making sure to check with different sources before forming a final opinion. Additionally, it is crucial to consider both the ratings and the detailed descriptions provided in order to get a rounded view of a product or service.

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