



WEIGHTING OF VALENCE, VOLUME, AND CREDIBILITY BY CONSUMERS OF HIGH RISK PRODUCTS: A STUDY OF ONE DETAILED NEGATIVE REVIEW VERSUS TEN POSITIVE REVIEWS

Yusuf Rahman Al Hakim

Universitas Mayjen Sungkono Mojokerto
correspondence: yusufrahmanalhakim@gmail.com

Abstract

Consumers frequently encounter one detailed negative review alongside ten positive reviews when evaluating high risk products. This study synthesizes existing literature to explain how consumers weigh valence, volume, and credibility under such asymmetric conditions. Findings indicate that a single negative review consistently overpowers ten positive reviews due to negativity bias, emotional contagion, source credibility effects, and non compensatory decision strategies. Product categories with high perceived risk such as skincare and electronics amplify this asymmetry. The review's specificity, recency, and the seller's response quality moderate the effect. Volume of positive reviews offers limited protection because consumers process information narratively rather than mathematically. These results challenge the assumption that accumulating positive reviews effectively counteracts negative information. The study provides a theoretical framework for understanding information weighting in electronic word of mouth and offers practical guidance for reputation management in high risk product markets.

Keyword: negative review, consumer decision, electronic word of mouth, perceived risk, source credibility

Introduction

The phenomenon of online product purchasing has transformed how consumers access information before deciding to buy an item. Before the digital era, an individual might ask neighbors or family members about their experience using a specific product. Now, this practice has shifted to a virtual space filled with thousands, or even millions, of opinions from strangers. This transformation reflects changing patterns of online communication and the increasingly massive dynamics of virtual communities that shape social interaction in today's digital society (Darmawan, 2021). Prospective buyers read various comments, evaluate star ratings, and scrutinize photos before clicking the "buy" button. This condition creates a new landscape where the collective voice of the masses holds significant power in shaping perceptions toward a brand or product. This information-seeking process has become a mandatory routine for most consumers, especially when they face products with relatively high prices or non-negligible usage risks (Li et al., 2021). While the availability of abundant reviews provides a sense of security, it also serves as a source of confusion due to the sheer volume of data that must be processed. In such situations, consumers tend to seek specific patterns or signals that can guide their decisions. The importance of the role of online consumer reviews and ratings in driving purchase decisions, including impulsive buying behavior, has become a crucial focus in modern consumer behavior studies (Darmawan, 2023). Such signals might include a dominant number of positive reviews, the reputation of the reviewer, or even a single negative comment written in great detail. The pattern of searching for meaning from this collection of social data forms the foundation of how the mechanism of social proof operates within the realm of purchase decisions. The higher the perceived uncertainty, the greater the reliance on available social cues (Melamed et al., 2019). Ultimately, this phenomenon demonstrates that consumer decisions are not merely the result of rational considerations regarding product attributes, but also a product of digitalized social interaction.

One of the most common forms of social proof encountered is the accumulation of a large volume of positive reviews. Consumers often associate a product with a 4.5-star rating from two thousand reviews as a safe choice that has been tested by many (Ma, 2023). The emerging

assumption in the buyer's mind is that it is impossible for that many people to have chosen incorrectly. This principle aligns with the human psychological tendency to follow the behavior of the majority when facing unfamiliar situations. Effective management strategies for consumer reviews have become a primary determinant in increasing product competitiveness and company reputation management in the online market (Negara et al., 2021). In shopping for body care or electronic products, where the consequences of a purchasing error could be skin irritation or device failure, the urge to follow the mainstream becomes even stronger. A study on buyer behavior shows that consumers are more comfortable purchasing products with a thousand positive reviews than products with twenty perfect reviews from a small number of people. Review volume serves as an easily digestible indicator of reliability. However, this faith in large numbers has its own fragility. The presence of one detailed negative review can shake the foundation of trust that has been built by a hundred positive reviews (Stevens et al., 2021). A deep understanding of the factors that serve as antecedents to customer switching behavior is highly necessary to maintain loyalty amidst the fierce competition among online stores (Darmawan, 2022). This phenomenon is intriguing as it demonstrates that not all information carries the same weight in the consumer's cognitive process. Negative information tends to be more prominent, more easily remembered, and more frequently shared compared to positive information. Consequently, a well-explained negative review can become the nail that punctures the ship of consumer trust, even if the hull of that ship is made of thick, positive review timber.

The influence of a single negative review on purchasing decisions is not uniform across all product categories. Products with high perceived risk, such as cosmetics, skincare, medical devices, and electronic goods, demonstrate greater vulnerability to negative information (Işçi & Kitapçı, 2020). Someone intending to purchase a facial moisturizer will read negative reviews about acne breakouts more carefully than positive reviews about the softness of its texture. Similarly, a prospective laptop buyer will remember comments about overheating in a certain model rather than praise for its slim design. This mechanism relates to what is known as negativity bias, which is the human brain's tendency to give greater weight to bad experiences compared to good ones. From an

evolutionary perspective, the ability to detect threats is more important for survival than detecting opportunities. In shopping for high-risk products, the threats mentioned are the potential for financial loss, health disturbances, or significant disappointment after spending money. A detailed negative review provides a concrete picture of that threat, making it feel real and imminent. It is important to remember that in this era, the integration of elements such as promotions, product reviews, and price perception is crucial in determining the consumer's choice of an online store (Darmawan, 2023). General positive reviews like "the product is good" do not possess the same strong visualization power as a negative review that details the process of a rash appearing from the first day to the third day of usage (Ifie, 2020). It is this narrative power of negative reviews that enables them to cancel out dozens of praises that previously convinced the consumer.

The existence of e-commerce platforms and social media has accelerated the spread and amplification of negative reviews (Chen et al., 2021). In addition to reviews, the use of email marketing remains relevant as part of the digital marketing communication mix to maintain customer engagement (Sinambela & Darmawan, 2021). A complaint uploaded in a discussion forum or an online store's comment section can reach thousands of prospective buyers within hours. The nature of algorithms, which often prioritize controversial or emotional content, makes negative reviews more likely to appear on the first page of search results. Conversely, positive reviews that tend to be monotonous and uniform often sink into the pile of information. This visibility imbalance strengthens the effect of a single negative review on public perception. Producers must also ensure that access to technology-based services remains inclusive for all segments of society, in order to address challenges related to skills and access gaps (Ramle & Mardikaningsih, 2022). Consumers who search using keywords like "problems" or "side effects" will be immediately directed to the bad experiences of others. Producers or sellers who respond to negative reviews well can dampen their impact, yet many fail to do so. A defensive or even confrontational response from the seller actually exacerbates the situation and turns a single complaint into a larger center of attention. On the other hand, consumers are also becoming increasingly savvy in detecting fake positive reviews intentionally created by product owners (Choudhury &

Srinivasan, 2019). The ability to distinguish between authentic reviews and fabricated ones is increasingly honed through repeated experience. Detailed negative reviews tend to be considered more authentic because they entail reputational risks for the author. Someone who claims to have experienced an allergic reaction to a face cream is willing to include photos and a chronological breakdown, something rarely done by creators of fake positive reviews. This authenticity inherent in negative reviews is another reason why their weight often exceeds that of dozens of positive reviews.

The credibility of the review source is another dimension that influences how consumers weigh positive versus negative information. A negative review written by a verified account with a purchase history and a complete profile has a far greater impact than a review from an anonymous, newly created account. Effectiveness in increasing business revenue is now strongly influenced by the synergy between business capital, education level, and the technological adaptation possessed by business owners (Sinambela et al., 2021). Consumers naturally make quick assessments of the reviewer's credibility based on the digital footprint left behind. Profile pictures, the number of previous reviews, the language used, and even the consistency of writing style become clues as to whether someone is trustworthy. In the body care product category, a reviewer who explains their skin type and compares it with several other products will be considered more credible than one who simply says, "this product is bad." The richness of detail in negative reviews often serves as a marker of authenticity that is difficult to fake. Meanwhile, short and generic positive reviews can actually arouse suspicion as being paid content. The paradox is that modern consumers tend to trust information that confirms risks more than information that offers hope. The expectation that a product will perform according to advertising promises is already low, so negative reviews feel like confirmation of initial suspicions. Conversely, positive reviews are faced with innate skepticism that demands stronger proof. This condition creates a unique information asymmetry in the product review ecosystem, where one well-explained negative review can shift the beliefs built by dozens of positive testimonials.

The main problem arising from the dynamics above is the imbalance in information weight between positive and negative reviews in the consumer decision-making process. Review systems designed to

provide a balanced picture of a product's quality actually produce distortion due to the psychological mechanisms inherent in human beings. In this regard, legal protection for consumers in online transactions particularly against counterfeit halal products on e-commerce platforms becomes a crucial aspect that requires the attention of regulators (Amin et al., 2023). Consumers who read twenty positive reviews and one negative review often end their search session with the perception that the product carries a risk that cannot be ignored. Yet, statistically, the customer satisfaction rate reaches more than 95 percent. This distortion is exacerbated by the tendency of dissatisfied people to write longer and more detailed reviews compared to satisfied ones. A customer who experiences an allergic reaction will take the time to document their bad experience, while thousands of customers whose skin is compatible with the same product do not feel compelled to write anything. Consequently, the review database available to the public does not reflect the actual distribution of experiences, but rather a sample that is biased toward negative incidents. This inequality of representation becomes a serious problem because consumers use non-representative data as a basis for decisions. They ignore the fact that the majority of users do not experience problems, yet one detailed report on side effects is enough to defeat the positive impression of that silent majority.

Another equally important issue is the variation in how consumers interpret the valence, volume, and credibility of reviews, which is inconsistent between individuals. Two people reading the exact same set of reviews can arrive at opposite conclusions due to differences in weighting each attribute. A consumer who is very concerned with the safety of cosmetic ingredients will place extra weight on a negative review that mentions an allergic reaction, while another consumer who is more focused on price will ignore that review as long as the price is attractive. Consumers with previous bad experiences in the same product category tend to be more sensitive to negative information than novice consumers who do not yet have negative memories. Demographic characteristics such as age, education, and income also influence how a person assesses the credibility of a reviewer. Older people may trust long reviews with good grammar more, while younger consumers rely more on short videos on social media. This diversity in information-weighting mechanisms

makes the prediction of consumer behavior complex. Sellers cannot rely on simple strategies like accumulating a thousand positive reviews to secure conversion rates, because one negative review found by the right consumer can cancel it all out. This variability in response to the same information demands a more nuanced understanding of the psychographic profile of the target market. Beyond focusing on reputation, companies are now also required to conduct sustainability communication through green marketing to strengthen consumer awareness of environmental integrity (Essa & Mardikaningsih, 2021).

The urgency to systematically understand how social proof and negative reviews influence purchasing decisions is exceptionally high in an era where the majority of commercial transactions have migrated to the digital realm. Producers and retailers have lost the ability to interact directly with prospective buyers, leaving reviews as the sole bridge of information between seller and buyer. The quality of this bridge determines whether an individual will cross over to complete a purchase or turn away. In high-risk product categories such as body care and electronics, where purchase errors can result in significant medical or financial losses, an understanding of these dynamics becomes crucial. Companies that fail to manage the perceptions shaped by negative reviews risk losing market share even if their products are objectively of high quality. Conversely, companies capable of navigating this information landscape can maintain their reputation even after receiving valid complaints. Regulators also have an interest in understanding this phenomenon, as it concerns the protection of consumers from misleading information, whether it is excessively positive or overly negative. Research on this topic can provide a foundation for developing ethical guidelines in product review management, as well as helping consumers become better evaluators of information. Without a systematic understanding, the risk faced is an inefficient market where poor-quality products can survive thanks to a flood of fake positive reviews, while excellent products are eliminated by a single viral negative review.

The objective of this literature study is to construct a theoretical framework regarding the mechanisms of information weighing by consumers when faced with an imbalance between one detailed negative review and numerous positive reviews. This framework will integrate the

concepts of negativity bias, social proof, source credibility, and perceived risk to explain why the weight of a single negative review often outweighs ten positive reviews. Theoretically, this study contributes to the development of consumer behavior models in the digital era by highlighting the asymmetry in processing information of different valences. Practically, the results of this study can be used by business actors to design response strategies to negative reviews, as well as by consumers to become more reflective evaluators of information.

Method

This research utilizes a qualitative literature study approach as the primary framework to address the established problem formulation. A literature study within the realm of research methodology functions to systematically synthesize available knowledge without conducting primary data collection (Sharma, 2023). In accordance with this principle, this research does not involve interviews, observations, surveys, or any experiments. All analytical materials originate from published written documents, such as scientific journal articles, book chapters, conference proceedings, and trusted research reports (Leske, 1990). The selection of sources was carried out with strict criteria focusing on the topics of social proof, consumer reviews, negativity bias, perceived risk, and decision-making within e-commerce environments. Lancaster and Crowther (2012) emphasize in their same work that the validity of a literature study depends heavily on the scope and depth of the referenced sources. Therefore, the literature search was conducted through indexed academic databases such as Scopus, Web of Science, and Google Scholar, with a publication time range of the last ten years to ensure relevance to current digital market conditions. The search strategy employed a combination of keywords such as "online review valence," "negative review impact," "social proof consumer decision," "perceived risk product category," and "source credibility electronic word of mouth." The selection process was conducted in two stages: first based on titles and abstracts, and second based on a full-text reading to assess the contribution to the research questions.

Data analysis in this literature study follows a narrative synthesis procedure as an approach to combine findings from various heterogeneous sources. Unlike meta-analysis, which requires quantitative

data from experimental research, narrative synthesis allows for the integration of insights from qualitative, quantitative, and theoretical studies into a coherent explanatory framework (Melendez-Torres et al., 2015). The first step in the analysis is the identification of major themes that emerge repeatedly in the literature, such as the differing impacts of positive versus negative reviews, moderation by product type, and factors influencing source credibility. The second step is tracing the relationships between themes to observe patterns of consistency or contradiction across studies. For example, some research shows that the volume of positive reviews can protect a product from the impact of negative reviews when that volume is very high, while other research finds that a single negative review remains dominant even with a ratio of twenty to one. Specific conditions causing differences in findings, such as sample characteristics or experimental manipulations, are examined. The third step is synthesis, which involves constructing an integrated explanation that can summarize all available evidence without ignoring anomalies. In this research, the synthesis is directed toward answering the question of how consumers weigh the valence, volume, and credibility of reviews, with a focus on high-risk product categories.

The limitations inherent in the literature study approach are explicitly acknowledged in this method's design. A literature study cannot claim statistical generalization in the same way as survey research with large samples. However, the strength of this approach lies in its ability to build a rich and contextual conceptual understanding based on the accumulation of evidence from various research settings. To minimize bias in source selection, this study applies the principle of full transparency in reporting inclusion and exclusion criteria. All sources meeting the criteria are included, without exception, to avoid cherry-picking that could manipulate the conclusions. The analysis process is conducted iteratively, meaning the researcher moves back and forth between the data (texts from the literature) and the conceptual framework being constructed to ensure that every claim is supported by adequate evidence (Ermel et al., 2021). The final step is the writing of the report, which presents the findings in a structured narrative form, with direct citations from original sources to illustrate key points. This

approach allows readers to independently assess the strength of the evidence underlying each statement made in the discussion.

Result and Discussion

Consumers faced with one detailed negative review and ten positive reviews exhibit an asymmetrical information processing pattern (Wang et al., 2021). Cognitively, the human brain is designed to pay greater attention to potential threats than to potential gains, a mechanism known in psychology as negativity bias. This is highly relevant to the psychological mechanism of consumer decision-making, which is fundamentally guided by prospect theory, where the psychological weight of a loss is felt to be far heavier than that of a gain (Sinambela et al., 2012). In the purchase of body care products, the threat in question may be skin irritation, an allergic reaction, or wasting money on a product that offers no benefits. A negative review that chronologically details how a user experienced a rash after three days of using a certain cream will activate the threat-detection system in the prospective buyer's brain. Conversely, ten positive reviews stating that the cream is moisturizing or fragrant do not trigger the same strong emotional response. This difference in emotional response intensity is the foundation for why the weight of one negative review can overcome ten positive ones. Consumers do not behave like algorithms calculating average star ratings, but rather as beings guided by emotion and self-preservation instincts. The higher the perceived risk of a product, the more dominant the role of negativity bias in the evaluation process. Electronic products such as laptops or mobile phones, where a purchasing error could mean the loss of data or a large sum of money, show effects just as powerful as those of body care products.

Review volume, although often considered an indicator of reliability, has limitations in countering the impact of a single negative review (Filiari et al., 2019). Ten positive reviews might sound convincing when read one by one, but when compared to one negative review, a ten-to-one ratio is not large enough to create a sense of security. Research in social psychology suggests that the ratio required to neutralize one piece of negative information can reach five-to-one or even higher, depending on the credibility and detail of that negative information. Understanding this consumer behavior is also related to how behavioral data is used for ad

personalization in digital marketing to remain relevant without violating user privacy (Fared & Darmawan, 2021). Consumers intuitively ask: why, out of eleven people who bought this product, did one person experience a serious problem? This question triggers an inference process that perhaps there is a manufacturing defect or a hidden risk not experienced by the other ten people. The conclusion drawn is not that ten people were satisfied and one was not, but rather that there is a real possibility of becoming the twelfth person to suffer the same fate as the one disappointed user. In high-risk product categories, consumers prefer to avoid the possibility of loss rather than pursue the potential for gain. This principle, known as prospect theory, explains why one negative review is capable of canceling out the confidence built by ten positive reviews. A large volume of positive reviews can actually backfire when consumers start questioning why no one wrote about a specific risk, and then one negative review emerges as the answer to that information void.

The credibility of the review source acts as a moderating variable that critically determines the impact of a single negative review relative to ten positive ones. A negative review written by an account with a profile picture, real name, purchase history, and prior reviews for other products will be considered a serious warning. Conversely, negative reviews from an anonymous, newly created account without any previous digital footprint can be easily dismissed by consumers as a form of sabotage or fake reviews from competitors. In this regard, the integrity of a company in maintaining consumer trust is essential, especially when utilizing Corporate Social Responsibility (CSR) as a marketing instrument for brand image formation (Al Hakim et al., 2020). In practice, consumers perform rapid assessments of various credibility signals (Naujoks & Benkenstein, 2020). The language used, the level of detail, internal story consistency, and the presence of photo or video evidence become determining factors. A negative review accompanied by photos of skin rashes or screenshots of customer service messages will carry an extraordinarily high weight. Meanwhile, ten positive reviews that are all written in similar language, with identical lengths, and without personal detail will trigger suspicion as paid content. Ironically, a manufacturer's attempt to boost the number of positive reviews is often done in a way that collectively lowers their

credibility. Savvy consumers can detect unnatural review patterns, and once suspicion arises, the entire collection of positive reviews loses its influence. In such a situation, a single authentic negative review looks even more convincing because it is perceived as an independent voice with no commercial interest.

Product categories with high perceived risk exhibit extreme sensitivity to negative reviews due to the nature of consequences that are not easily reversible. For body care products, a consumer who experiences an allergic reaction cannot restore their skin condition to its original state simply by returning the product. The costs incurred are not just the money spent on the product, but also time, pain, and potential medical expenses. Beyond reputation, the transparency of the supply chain for environmentally friendly products through blockchain technology is now proven to be very effective in building consumer trust (Mardikaningsih et al., 2024). Similarly, for electronic products, damage to a device can lead to the loss of irreplaceable, important data. These permanent or difficult-to-restore consequences make consumers highly risk-averse. In these conditions, a single negative review describing a bad experience serves as a mental simulation of what might happen if the consumer makes the wrong choice. The more vivid and detailed that simulation, the greater the deterrent effect. Conversely, ten positive reviews only offer a picture of the desired outcome such as healthy skin or a well-functioning device. Because the desired outcome is the default expected condition, information about it does not provide significant added value. Consumers already assume the product will work as it should, so positive reviews merely confirm this baseline assumption. Negative reviews, by offering information that goes beyond basic assumptions, contribute more information to the decision-making process (Hirschmeier & Tilly, 2020). On the other hand, it is important for companies to ensure that human resource management can build relevant competencies in bridging the skills gap toward a green economy (Essa & Mardikaningsih, 2023). This phenomenon is known in literature as asymmetrical information contribution, where negative information has higher predictive value than positive information.

The process of reading reviews by consumers is not a passive activity of receiving information, but an active pursuit of constructing a narrative

about a product (Laer, 2020). When reading ten positive reviews, consumers construct a narrative that the product will likely provide a satisfying experience. However, this narrative is fragile because it has not been tested by contradiction. When a single negative review appears, it acts as an anomaly that threatens the coherence of the initial narrative. This dynamic is also influenced by how social strata and lifestyles shape consumption tastes and how one expresses status through the choice of goods they use (Sinambela & Halizah, 2023). The consumer's brain then enters problem-solving mode: how to explain the existence of one bad experience in the midst of ten good ones? Several potential explanations emerge. The first is that the product has variable quality, leading to some defective units. The second is that the different conditions of users lead to different results. The third is that the negative review is fake. Among these, consumers tend to choose the explanation that is most plausible based on their prior experience and knowledge. If a consumer has personally experienced products with inconsistent quality, they will tend to choose the first explanation. If a consumer knows that body care products react differently on different skin types, they will tend to choose the second. This tendency to choose the explanation most consistent with personal experience explains why two consumers can respond to the exact same set of reviews differently. This narrative-building process is highly personal and influenced by each individual's consumption history.

The valence of a detailed negative review has the power to transform the function of social proof from something reassuring into something cautionary (Shihab & Putri, 2019). Under normal conditions, social proof operates on the principle that if many people perform an action, then that action is correct or good. However, the presence of one credible negative review activates an opposing form of social proof: evidence that at least one person has suffered a loss. Consumer protection becomes crucial, where public legal awareness regarding online credit agreements must be addressed from the perspectives of civil law and consumer protection (Hardyansah et al., 2022). The preventive principle of "prevention is better than cure" takes control of the evaluation process. Consumers no longer ask, "is this product good?" but rather, "am I willing to take the same risk as the person who wrote that negative review?" Interpersonal mistrust among the younger generation often arises due to privacy violations

occurring on social media (Negara et al., 2022). This shift in questioning alters the standard of evidence required to make a decision. To decide to buy, consumers need proof that the risk experienced by that one individual will not happen to them. Such proof is rarely available from ten positive reviews because positive reviews usually do not discuss risks. Consequently, consumers are placed in a difficult position; there is insufficient information to ensure they will not become the next victim. In this state of uncertainty, the most rational choice is not to buy. Products with one credible negative review, despite being surrounded by dozens of positive ones, are ultimately rejected by risk-conscious consumers. Therefore, an ethically responsible approach to technological development is highly necessary to ensure fairness for all parties in the digital ecosystem (Radjawane & Mardikaningsih, 2022). This phenomenon explains why many products with high average ratings but containing a few detailed negative reviews experience low conversion rates. Consumers do not read the average; they read the extremes.

The clarity and specificity of a negative review are the determining factors in the magnitude of its impact on purchasing decisions (Craciun & Moore, 2019). A review that states "this product is bad, not recommended" will have minimal impact because it provides no verifiable or understandable information. Conversely, a review that specifically explains that after using a certain shampoo for one week, hair became more brittle than usual, accompanied by a photo of clumps of hair in the drain, will possess extraordinary power. In this case, the digital literacy of youth plays a significant role in how they interpret information on social media, including the ability to distinguish between authentic and misleading reviews (Kurniawan et al., 2021). Specificity creates credibility because the author demonstrates knowledge about the product and the ability to observe changes. Specificity also helps consumers compare their conditions with the conditions of the reviewer. A consumer with thin, brittle hair will consider a review about hair loss as a highly relevant warning. Another consumer with thick hair might consider it less relevant. Thus, a detailed negative review does not only impact generally, but also selectively on specific consumer segments that share characteristics with the reviewer. This natural segmentation actually helps the market because high-risk consumers can self-select out of the product's customer base.

However, from the seller's perspective, losing certain consumer segments can mean losing significant market share. Ten general and non-specific positive reviews are unable to provide selective guidance like this, making their overall informational value lower.

The sequence of review presentation influences how consumers weigh one negative review relative to ten positive ones. A negative review appearing at the beginning of a list establishes a framing effect known as the anchoring effect. Once an anchor is set that the product is problematic, the consumer will read the subsequent ten positive reviews through a lens of doubt. This is closely related to the technical and ethical dimensions of Search Engine Optimization (SEO) management to ensure that online business visibility is managed transparently (Arifin et al., 2021). They will look to see if the positive reviews mention the same problem, and if not, they will question why it was omitted. Conversely, if ten positive reviews appear first and a negative review appears at the end, the impact may be diminished because the consumer has already formed an initial positive opinion. However, the primacy effect is not always stronger than the recency effect in product reviews. Some studies indicate that consumers better recall information read last, especially if that information is negative and surprising (Camilleri, 2020). Consequently, e-commerce platforms that arrange reviews in reverse chronological order, with the newest reviews at the top, provide an advantage to newly added negative reviews. A fresh negative review will be immediately visible without the need for scrolling, while old positive reviews remain buried below. Such default settings reinforce the impact of a single negative review because it occupies the most prominent position. Consumers who are reluctant to scroll may only read the first three to five reviews, and if one of them is negative, they have already made the decision not to purchase. This phenomenon demonstrates that the platform's interface design plays a major role in determining how heavily a single negative review is weighted relative to a collection of positive reviews.

The numerical asymmetry of ten positive reviews versus one negative review is an interesting subject for analysis. Mathematically, a ten-to-one ratio indicates a 91 percent satisfaction rate, assuming all reviews represent real experiences. In the real world, a 91 percent satisfaction rate is very high and usually serves as an indicator of an

excellent product. However, consumers do not process information mathematically; they process it narratively and emotionally. The 91 percent figure does not feel real because no consumer experiences 91 percent of a product. What exists is a whole experience, either good or bad. One negative review represents one possible whole bad experience, while ten positive reviews represent ten possible whole good experiences. When a consumer imagines using the product, they can only visualize one scenario, whether good or bad. Because the bad scenario is easier to imagine in detail thanks to the specific negative review, they tend to visualize themselves in that bad scenario. This mental process, known as the simulation heuristic, explains why a ten-to-one ratio does not provide a sense of security. Consumers will never be 91 percent of a product; they will be 100 percent of an experience, and if there is a 9 percent chance that the experience is bad, that chance cannot be ignored. Strategies to overcome the erosion of customer loyalty amidst intense market competition require companies to consistently maintain quality and responsiveness to consumer feedback (Sinambela & Aprilianti, 2011). In high-risk product categories, a 9 percent chance is even considered too high due to the potential consequences. Consumers will wait for a product with a hundred-to-one or even a thousand-to-one ratio before feeling sufficiently safe. In other words, the standard of evidence demanded by consumers for high-risk products far exceeds a ten-to-one ratio.

The role of emotion in processing negative reviews is inseparable from the cognitive impacts already described (Ren & Hong, 2019). A negative review written with a tone of disappointment, anger, or severe frustration will transmit that emotion to the reader through the mechanism of emotional contagion. Consumers reading about someone who experienced a rash after using a certain cream will subconsciously feel a slight sense of disgust or fear. This phenomenon must also be understood by business practitioners when dealing with the clash between the local values of traditional communities and the green marketing approaches implemented by companies (Mardikaningsih et al., 2021). These mild negative emotions are then associated with the product in implicit memory. When the consumer later sees the same product on a store shelf or a webpage, a vague feeling of discomfort will arise without them

consciously knowing the cause. This process of forming affective associations occurs outside of awareness and is very difficult to counter with rational arguments. Ten positive reviews written in a neutral or flatly enthusiastic tone do not possess the ability to transmit emotions with the same intensity. Thus, one negative review wins not only the cognitive battle but also the affective one. Consumers might consciously say they understand that ten people were satisfied and one was not, but subconsciously, they have formed a negative feeling toward the product that cannot be eliminated simply by reading more positive reviews. This phenomenon explains why strategies to increase the number of positive reviews after receiving a negative one often fail to restore conversion rates. The damage incurred is emotional, not just cognitive, and emotional repair requires different interventions, such as empathetic seller responses or convincing warranty offers.

The distinction between search goods and experience goods influences the magnitude of the impact of a single negative review. Body care and electronic products fall into the category of experience goods, where quality cannot be determined prior to purchasing and using them. In this category, consumer reviews become the primary source of information because prospective buyers have no other way to assess the product. Consequently, reliance on reviews is extremely high, and every piece of negative information carries significant weight. Conversely, for search goods such as books or simple household appliances, where attributes can be assessed before purchasing, negative reviews have a smaller impact because consumers can verify the negative claims themselves. Therefore, product development processes must always be adjusted to enhance quality in line with dynamic market needs (Sinambela & Aprilianti, 2012). For example, if a review mentions that a book has blurred print, a prospective buyer can view a sample page online. If a review mentions that a pan dents easily, a prospective buyer can examine the material and thickness from the specifications. However, for body care products, a claim that a cream causes acne cannot be verified before usage. Consumers must choose to believe or disbelieve the review without the ability for independent verification. This condition of high uncertainty strengthens the influence of negative reviews because consumers possess no defensive mechanism other than avoiding the product. Ten positive

reviews do not provide a guarantee of verification; thus, they only offer hope, not certainty. One negative review provides a warning about the possibility of a bad outcome, and in the absence of certainty, a warning will always carry more weight than hope.

The decision to buy or not buy after reading one negative review and ten positive ones is also influenced by consumer personal characteristics such as risk tolerance and need for cognition. It is important for companies to understand how the interaction between the goods market and the money market can have implications for macroeconomic policy, which subsequently impacts consumer purchasing power (Jahroni & Darmawan, 2018). Consumers with low risk tolerance, which may be caused by past bad experiences or personality traits, will be highly sensitive to a single negative review. For them, one warning is enough to cancel out ten recommendations. Conversely, consumers with high risk tolerance might ignore one negative review and still purchase based on the ten positive reviews, especially if the product price is attractive or they feel lucky. The need for cognition the tendency of an individual to enjoy thinking deeply also moderates this relationship. Consumers with a high need for cognition will read all eleven reviews carefully, compare details, assess the credibility of each source, and perhaps seek additional reviews before deciding. They tend to give a more balanced weight to positive and negative reviews. Conversely, consumers with a low need for cognition will use simple rules of thumb such as "one negative is enough to reject" or "ten positives are enough to buy," depending on situational factors like mood or time pressure. This variability between individuals means that the impact of a single negative review is not uniform across the entire consumer population. However, for high-risk products, the proportion of consumers with low risk tolerance tends to be larger due to the serious consequences of failure. Thus, in the aggregate, one negative review remains a dominant influence even if some consumer segments might remain unaffected.

Seller response strategies to negative reviews can significantly alter how consumers weigh one negative review against ten positive ones. A negative review that is responded to quickly, politely, and with a solution can be transformed from a threat into an asset. Consumers who read a

negative review and then see the seller's response offering a product replacement, a sincere apology, or a technical explanation regarding the cause of the problem will have a different perception. They no longer view the product as problematic, but rather view the seller as an entity that is responsible and caring. In such cases, one negative review actually becomes proof that the seller can be relied upon when problems occur. Furthermore, the role of social networks in helping business practitioners gain broader market access is crucial amidst increasingly fierce business competition (Lestari & Mardikaningsih, 2012). Ten positive reviews without seller interaction provide no information about the quality of after-sales service. Thus, one negative review that is well-responded to can have higher value than ten positive reviews from a risk-assessment perspective. Conversely, negative reviews that are ignored or responded to defensively will reinforce the negative impression and make consumers even more certain not to buy (Kumar, 2023). Defensive responses such as blaming the consumer or doubting the honesty of the review will be considered confirmation that the seller cannot be trusted. In this situation, one negative review does not only defeat ten positive ones but also damages the seller's reputation for the long term. A seller's ability to manage public complaints becomes the determinant of whether a single negative review will be a stumbling block or a stepping stone to building trust. Modern consumers pay close attention to how a brand treats dissatisfied customers, as that behavior is considered an indicator of the brand's true character.

The influence of time on how consumers weigh negative reviews also deserves attention (Luan et al., 2019). A negative review written three years ago will carry far less weight than one written last week, especially for products that may have undergone formula improvements or changes in production processes. Consumers naturally assume that older issues may have been resolved, particularly if no similar negative reviews have appeared in more recent periods. Business sustainability strategies amidst regulatory uncertainty and managerial challenges are key elements that business leaders must understand (Mardikaningsih & Darmawan, 2021). Ten positive reviews written within the last six months will be more convincing than one old negative review. However, if that negative review is fresh and there is no indication that the seller has implemented improvements, its impact will be maximized. In practice, consumers

observe the date of a review as part of their assessment of credibility and relevance. They trust current information more as it is perceived to reflect the product's current condition. Ten positive reviews from last year may be considered irrelevant if the product has changed its formula or packaging. Thus, this temporal dynamic creates a situation where a ten-to-one ratio can change its meaning depending on when the reviews were written. Diligent consumers will filter reviews by time range, and if they find that a single negative review is the most recent while ten positive reviews are obsolete, they will tend to follow the negative one. This phenomenon demonstrates that a large volume of positive reviews is insufficient to secure quality perception if those reviews are not updated periodically. Products need to consistently generate new positive reviews to ensure the ten-to-one ratio remains meaningful to consumers.

High-risk product categories such as body care and electronics possess additional characteristics that reinforce the impact of a single negative review, namely high switching costs and information costs. Switching costs refer to the effort required to move from one product to another following a failure. For body care products, switching after experiencing an allergic reaction means undergoing skincare treatments to restore skin condition, which consumes time and money. For electronics, switching after a device fails means losing data and time spent configuring a new device. Information costs refer to the effort required to study alternative products. Because the market for body care and electronic products is highly saturated with hundreds of options, studying each option in detail requires a significant amount of time. Consequently, consumers tend to use elimination strategies rather than selection strategies. They are quicker to eliminate products that have negative reviews than to try and evaluate all products positively. On the other hand, social media now holds great potential as an effective promotional tool for online businesses if managed with the right content strategy (Infante & Mardikaningsih, 2022). A single negative review becomes an efficient elimination criterion because it saves the time and energy that would otherwise be spent comparing ten positive reviews from different products. In this case, one negative review does not only defeat ten positive ones for the same product, but also eliminates that product from consideration entirely. Products that have no negative

reviews, even if their volume of positive reviews is smaller, may be more preferred because they do not trigger the elimination process. This strategy is known as non-compensatory decision-making, where a single negative attribute is sufficient to negate all other positive attributes. The higher the perceived risk, the greater the consumer's tendency to use such non-compensatory strategies.

The influence of a single negative review on purchasing decisions can also be amplified by a phenomenon known as the availability cascade (Varga & Albuquerque, 2019). When a negative review gains attention, either because it is written in a compelling style or because it is responded to controversially by the seller, that review can become viral. In viral conditions, one negative review is read by thousands, while ten non-viral positive reviews are only read by a few dozen people. The effective ratio of exposure between negative and positive reviews becomes inverted. Consumers who never see the ten positive reviews because they are buried on the fifth page of search results, but see the negative review appearing on social media, will have a highly biased perception. Even consumers who later search for the product on an e-commerce platform and find the ten positive reviews may have already formed a negative opinion from the initial exposure on social media. This effect shows that a single negative review does not have to compete fairly with ten positive reviews in the same space. It can win the battle by changing the battlefield itself. Social media platforms, discussion forums, and community groups become arenas where one negative voice can achieve disproportionate amplification. Sellers who ignore these channels and focus only on collecting positive reviews on the e-commerce platform will lose the battle of perception. Modern consumers no longer just read reviews where they make purchases but also seek information from various sources before making a decision. One widely spread negative review can negate ten positive reviews that are limited to a single platform. In this regard, a deep understanding of social contracts and formal agreements in business practice becomes essential for every business practitioner (Da Silva et al., 2022).

Ten positive reviews can lose their influence entirely if consumers detect patterns indicating manipulation. Indications of manipulation can include similarities in linguistic style between reviews, closely clustered publication times, or suspicious user profiles. Once consumers suspect

that positive reviews are not authentic, they do not merely ignore those reviews; they also develop suspicion toward the product in general. In such situations, one authentic negative review becomes the only trustworthy source of information. Its weight becomes infinite because no positive information is considered credible enough to balance it out. Consumers will conclude that the product is likely problematic and the seller is attempting to cover it up with fake reviews. This conclusion is highly damaging to reputation and almost impossible to repair. Therefore, attempts to artificially boost the number of positive reviews can backfire, strengthening the impact of natural negative reviews. A wiser strategy is to let positive reviews grow organically from genuinely satisfied customers, even if the number is small. A few authentic positive reviews are more valuable than a hundred positive reviews that show signs of being fake. In the battle of one versus ten, credibility is the true battlefield. One authentic negative review will always defeat ten positive reviews whose authenticity is in doubt.

Conclusion

The conclusion of this literature study is that a single detailed negative review consistently carries a weight that exceeds ten positive reviews in purchasing decisions for high-risk products such as body care and electronics. The mechanisms underlying this dominance include the negativity bias inherent in human cognition, the stronger emotional effect of negative information, the higher credibility attached to authentic negative reviews, and the non-compensatory strategies used by consumers to manage risk. A large volume of positive reviews cannot offset a single negative review because consumers do not process information mathematically, but rather narratively and affectively. The credibility of the review source, the specificity of the information, and the seller's response to negative reviews act as moderating variables that can strengthen or weaken this basic effect. For products with consequences of failure that are difficult to rectify, consumers prefer to avoid risk rather than pursue potential benefits, such that one warning is sufficient to nullify ten recommendations.

The implications of these findings for marketing practitioners are that collecting a large number of positive reviews is not enough to

guarantee high conversion rates. Greater attention must be given to managing detailed negative reviews, including responses that are prompt, empathetic, and solution-oriented. Companies also need to ensure that existing positive reviews possess adequate levels of detail and credibility, rather than just generic statements of satisfaction. For consumers, the practical implication is the need for awareness that a single negative review may not represent the experience of the majority, and that decisions should consider the distribution of experiences in a more balanced manner. Suggestions for future research include conducting experimental studies that systematically test the critical ratio at which negative reviews begin to lose their dominance, as well as examining response differences across consumer segments based on psychographic characteristics. Cross-cultural research is also necessary to test whether these findings apply universally or are influenced by local cultural norms.

References

- Al Hakim, Y. R., Irfan, M., & Arifin, S. 2020. Corporate Social Responsibility Sebagai Instrumen Pemasaran: Pembentukan Citra Merek dan Kepercayaan Konsumen. *Jurnal Ekonomi Dan Bisnis*, 10(2), 51-64.
- Amin, M. N., Herisasono, A., Mujito, Khayru, R. K., & Zakki, M. 2023. Legal Protection of Consumers in Online Transactions for Counterfeit Halal Products on E-Commerce Platforms. *Journal of Social Science Studies*, 3(1), 53-58.
- Arifin, S, Y. R. Al Hakim, D. Darmawan, M. Irfan, & D. S. Sigita. 2021. Technical and Ethical Dimensions of Search Engine Optimization in Managing Online Business Visibility, *Studi Ilmu Sosial Indonesia*, 1(1), 193-208.
- Camilleri, A. R. 2020. *The Importance Of Online Reviews Depends On When They Are Presented*. 133, 113307.
- Chen, H., Duan, W., & Zhou, W. 2021. When Products Receive Reviews Across Platforms: Studying The Platform Concentration Of Electronic Word-Of-Mouth. *Information & Management*, 58(8), 103532.
- Choudhury, M., & Srinivasan, K. 2019. *An Overview Into The Aspects Of Fake Product Reviews, Its Manipulation, And Its Effects And Monitoring*. 1-2.
- Craciun, G., & Moore, K. 2019. Credibility Of Negative Online Product Reviews: Reviewer Gender, Reputation And Emotion Effects. *Computers In Human Behavior*, 97, 104-115
- Crowther, D., & Lancaster, G. 2012. *Research Methods* (2nd Ed.). Routledge.
- Da Silva, E. B., Darmawan, D., & Irfan, M. 2022. Understanding Social Contracts: Formal Agreements in Business Practice. *Studi Ilmu Sosial Indonesia*, 2(1), 127-144.

- Darmawan, D. 2021. Social Interaction in Digital Society: Changes in Online Communication Patterns and Dynamics of Virtual Communities, *Studi Ilmu Sosial Indonesia*, 1(1), 325-350.
- Darmawan, D. 2022. Literature review on antecedents of customer switching behavior. *Bulletin of Science, Technology and Society*, 1(3), 1-5.
- Darmawan, D. 2023. Pengaruh promosi, ulasan produk, dan persepsi harga terhadap pemilihan toko online. *Jurnal Industri Kreatif dan Kewirausahaan*, 6(1), 95-105.
- Darmawan, D. 2023. Studi empiris perilaku konsumen Aliexpress: Peran online consumer review, online customer rating, dan persepsi harga terhadap keputusan pembelian impulsif. *Jurnal Baruna Horizon*, 6(1), 1-13.
- Ermel, A. P. C., Lacerda, D. P., Morandi, M. I. W. M., & Gauss, L. (2021). *Literature Grounded Theory (LGT)*. 85-146.
- Essa, N. E., & Mardikaningsih, R. 2021. Sustainability Communication through Green Marketing: Strengthening Consumer Awareness and Corporate Environmental Integrity. *Journal of Social Science Studies*, 1(2), 233-238.
- Essa, N. E., & Mardikaningsih, R. 2023. The Strategic Role of Human Resource Management in Building Competencies and Bridging the Skills Gap Towards a Green Economy. *International Journal of Service Science, Management, Engineering, and Technology*, 4(3), 36-40.
- Fared, M. A. & D. Darmawan. 2021. Use of Consumer Behaviour Data for Personalised Advertising in Digital Marketing, *Studi Ilmu Sosial Indonesia*, 1(2), 93-108.
- Filieri, R., Raguseo, E., & Vitari, C. 2019) What Moderates The Influence Of Extremely Negative Ratings? The Role Of Review And Reviewer Characteristics. *International Journal Of Hospitality Management*, 77, 333-341.
- Hardyansah, R., R. Saputra, D. Darmawan, & D. S. Negara. 2022. Public Legal Consciousness Regarding Online Credit Agreements from Civil Law and Consumer Protection Perspectives, *Studi Ilmu Sosial Indonesia*, 2(1), 261-282.
- Hirschmeier, S., & Tilly, R. 2020. *Consumers' Need For Negative Product Information Before Reading Reviews*. 1-10
- Ifie, K. 2020. Excellent Product ... But Too Early To Say: Consumer Reactions To Tentative Product Reviews. *Journal Of Interactive Marketing*, 52, 35-51.
- Infante, A., & Mardikaningsih, R. 2022. The Potential of Social Media as a Means of Online Business Promotion. *Journal of Social Science Studies*, 2(2), 45-49.
- Işçi, Ü., & Kitapçı, H. 2020. Responses Of Turkish Consumers To Product Risk Information In The Context Of Negative Ewom. *Journal Of Business Economics And Management*, 21(6), 1593-1609.
- Jahroni, J., & Darmawan, D. 2018. Interaksi Pasar Barang dan Pasar Uang serta Implikasi Kebijakan Makroekonomi. *Jurnal Ekonomi dan Bisnis*, 8(2), 31-42.
- Kumar, N. D. 2023. *Managing Negative Product Reviews: Strategies And Research Findings*. 93-114.

Weighting of Valence, Volume, and Credibility by Consumers of High Risk Products: A Study of One Detailed Negative Review versus Ten Positive Reviews
(Yusuf Rachman Al Hakim)

- Kurniawan, Y, D. Darmawan, & R. K. Khayru. 2021. Social Media and Contemporary Youth Digital Literature, *Studi Ilmu Sosial Indonesia*, 1(2), 109-124.
- Laer, T. Van. 2020. *It's The Story, Stupid: The Consumer Reviews Most Likely To Influence Purchasing Decisions*. 12(2), 46-51
- Lancaster, G., & Crowther, D. 2012. *Research Methods: A Concise Introduction To Research In Management And Business Consultancy*. Routledge.
- Leske, J. S. 1990. Evaluating Sources For Secondary Analysis. *Heart & Lung*, 19, 537-539.
- Lestari, U. P., & Mardikaningsih, R. 2012. Peran Jaringan Sosial untuk Membantu Mendapatkan Akses Pasar. *Jurnal Ekonomi dan Bisnis*, 2(2), 73-83.
- Li, W., Dan, Q., Chi, M., & Wang, W. 2021. Influence Of Price Level And Perceived Price Dispersion On Consumer Information Search Behaviour: Moderating Effect Of Durables And Consumables. *Sustainability*, 13(4), 2105.
- Luan, J., Shan, W., Shan, W., Wang, Y., & Xiao, J. 2019. How Easy-To-Process Information Influences Consumers Over Time: Online Review Vs. Brand Popularity. *Computers In Human Behavior*, 97, 193-201.
- Ma, Q. 2023. *Introduction: Managing Product Reviews*. Iii-V.
- Mardikaningsih, R, S. N. Halizah, R. Nuraini, & D. Darmawan. 2021. Clashes Between Local Values and Green Marketing Approaches in Traditional Communities, *Studi Ilmu Sosial Indonesia*, 1(2), 157-172.
- Mardikaningsih, R., & Darmawan, D. 2021. Business Sustainability Strategies in the Facing of Regulatory Uncertainty and Managerial Challenges. *Journal of Social Science Studies*, 1(2), 111-118.
- Mardikaningsih, R., Mahardani, U. K., Aisyah, S., Darmawan, D., & Handoko, F. D. 2024. The Influence of Blockchain Technology on Eco-Friendly Product Supply Chain Transparency and Consumer Trust. *Journal of Engineering and Social Science*, 4(2).
- Melamed, D., Savage, S. V., & Munn, C. 2019. *Uncertainty And Social Influence*. 5(4), 237802311986697.
- Melendez-Torres, G. J., Thomas, J., Richardson, M., Felix, L., Lorenc, T., Thomas, S., & Peticrew, M. 2015. Lessons From Comparing Narrative Synthesis And Meta-Analysis In A Systematic Review. *The Lancet*, 386, 9.
- Naujoks, A., & Benkenstein, M. 2020. Expert Cues: How Expert Reviewers Are Perceived Online. *Journal Of Service Theory And Practice*, 30, 531-556.
- Negara, D. S., Darmawan, D., & Gardi, B. 2021. The Approach of Consumer Reviews to Product Competitiveness and Management Strategies. *Journal of Social Science Studies*, 1(2), 149-154.
- Negara, D. S., Darmawan, D., & Saktiawan, P. 2022. Privacy Violations on Social Media and Interpersonal Trust Among Young Generations. *Journal of Social Science Studies*, 2(2), 151-156.

- Radjawane, L. E., & Mardikaningsih, R. 2022. Building Ethical and Fair Technology: Approaches to Responsible Technology Development and Application. *Journal of Social Science Studies*, 2(1), 189-194.
- Ramle, N. L. B., & Mardikaningsih, R. 2022. Inclusivity in Technology-Based Services: Access and Skills Challenges. *Journal of Social Science Studies*, 2(2), 225-230.
- Ren, G., & Hong, T. 2019. Examining The Relationship Between Specific Negative Emotions And The Perceived Helpfulness Of Online Reviews. *Information Processing And Management*, 56(4), 1425-1438.
- Sharma, K. P. 2023. Writing A Literature Review In Reseach. *Deleted Journal*, 2(1), 34-44.
- Shihab, M. R., & Putri, A. P. 2019. Negative Online Reviews Of Popular Products: Understanding The Effects Of Review Proportion And Quality On Consumers' Attitude And Intention To Buy. *Electronic Commerce Research*, 19(1), 159-187.
- Sinambela, E. A. & D. Darmawan. 2021. Relevance of Email Marketing in the Contemporary Digital Marketing Communication Mix, *Studi Ilmu Sosial Indonesia*, 1(2), 301-324.
- Sinambela, E. A., & Aprilianti, E. T. 2011. Strategi mengatasi erosi loyalitas pelanggan di tengah intensitas persaingan pasar. *Jurnal Ekonomi dan Bisnis*, 1(2), 76-89.
- Sinambela, E. A., & Aprilianti, E. T. 2012. Proses Pengembangan Produk dan Peningkatan Kualitas Sesuai Kebutuhan Pasar. *Jurnal Ekonomi dan Bisnis*, 2(2), 26-37.
- Sinambela, E. A., & Halizah, S. N. 2023. Social Stratification and Lifestyle in Consumer Society: Status Expression Through Consumption and Taste Formation. *Studi Ilmu Sosial Indonesia*, 3(1), 367-392.
- Sinambela, E. A., D. Nurmalsari, D. Darmawan, & R. Mardikaningsih. 2021. The Role of Business Capital, Level of Education, and Technology in Increasing Business Income. *Studi Ilmu Sosial Indonesia*, 1(1), 77-92.
- Sinambela, E. A., Darmawan, D., & Mardikaningsih, R. 2012. Mekanisme psikologis keputusan konsumen berdasarkan prospek teori. *S*, 2(1), 40-52.
- Stevens, J. L., Esmark Jones, C. L., & Breazeale, M. 2022. Title Redacted: The Impact Of Negative Online Review Censorship. *Journal Of Product & Brand Management*, 31(4), 570-585.
- Varga, M., & Albuquerque, P. 2019. Measuring The Impact Of A Single Negative Customer Review On Online Search And Purchase Decisions. *Social Science Research Network* 1-5.
- Wang, Y., Zhong, K., & Liu, Q. 2022. Let Criticism Take Precedence: Effect Of Side Order On Consumer Attitudes Toward A Two-Sided Online Review. *Journal Of Business Research*, 140, 403-419.