

# ELECTRONIC WORD-OF-MOUTH, ORGANIZATIONAL JUSTICE, AND THE DISTRIBUTED FORMATION OF REPUTATION IN SCIENTIFIC AND RESEARCH ORGANIZATIONS

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## ABSTRACT

**Purpose:** This paper extends electronic word-of-mouth (eWOM) theory beyond consumer markets to explain how reputations are formed for scientific and research organizations operating under conditions of uncertainty and limited observability.

**Design/methodology/approach:** Drawing on reputation theory and organizational justice, the study develops a conceptual framework that positions eWOM as a distributed, audience-driven mechanism through which evaluative judgments from heterogeneous stakeholders are aggregated into shared reputational beliefs.

**Findings:** The framework identifies three interrelated dimensions of eWOM-based reputation—competence, social contribution, and integrity—and explains how perceptions of organizational justice shape the legitimacy and influence of eWOM signals. Rather than merely transmitting information, eWOM actively constructs reputational meaning by stabilizing fragmented evaluations across digital environments.

**Practical implications:** The findings indicate that marketing scientific and research organizations requires sustained attention to how organizational actions are interpreted across online platforms. Effective reputation stewardship depends on consistency, transparency, and ethical engagement, rather than short-term image management or reliance on formal performance metrics alone.

**Originality/value:** This study advances eWOM theory by demonstrating its relevance in non-commercial contexts and contributes to reputation research by clarifying how audience-driven reputational beliefs emerge under uncertainty. It provides a conceptual foundation for understanding the marketing and legitimization of scientific and research organizations in contemporary digital landscapes.

**Key words:** Electronic word-of-mouth, Organizational reputation, Scientific and research organizations.

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## Introduction

Scientific and research organizations increasingly operate in environments where stakeholders evaluate their credibility, integrity and social value, well beyond formal indicators of performance (e.g., Prike et al., 2024). Although traditional metrics (e.g., publications, citations) remain a central focus of assessments of scientific quality, they only offer partial accounts that aid audiences' formal judgments about research organizations. Indeed, such indicators are often complex and difficult for non-expert stakeholders to interpret (Williams, 2022). This leaves a significant level of uncertainty regarding future behavior, trustworthiness, and broader organizational conduct.

Digital communication environments have expanded the visibility of informational evaluative discourse. Online discussions across different technological platforms, professional blogs, and post-publication review venues increasingly operate as places where stakeholders can interpret, argue, and amplify opinions about works created by such institutions (Zimba & Gasparyan, 2021). Within these spaces, electronic word of mouth (eWOM) emerges as a distributed process through which reputational beliefs about such organizations are developed.

Despite the extensive existing research stream regarding corporate and organizational reputation at the firm level, there is little examination as to how eWOM operates as a reputational mechanism in scientific and research contexts. Indeed, current eWOM research streams largely focus on consumer markets, product evaluations, purchase intention, and service quality (e.g., Furner et al., 2021). eWOM is an effective means of developing and marketing the successes of research organizations. Such marketing is necessary because research organizations are difficult to observe directly, and judgments frequently concern moral legitimacy, competence, and long-term societal impacts (rather than immediate transactional value) (Varda et al., 2025).

This examination advances a theoretical framework that positions electronic word-of-mouth (eWOM) as an informal, audience-driven mechanism for reputation formation within scientific and research organizations. Within this framework, eWOM functions by aggregating dispersed evaluative judgments originating from heterogeneous stakeholder groups, thereby transforming fragmented commentary into coherent reputational meaning. Through this process, eWOM contributes to the development of shared beliefs about an organization's anticipated future behavior and identity as a scientific actor. Consequently, eWOM plays a vital role in shaping perceptions of organizational competence, social contribution, and integrity—dimensions that are foundational to trust, legitimacy, and the sustained support of diverse stakeholder communities.

This paper offers three primary contributions. First, it extends eWOM theory beyond conventional marketing domains by demonstrating its relevance for evaluating scientific and research organizations. Second, it incorporates eWOM into broader reputation theory by illustrating how reputational beliefs are constructed by stakeholders operating under conditions of uncertainty. Third, it establishes a conceptual foundation for understanding how research organizations are marketed, assessed, and legitimized within contemporary digital environments.

## Reputation in Scientific and Research Organizations

Reputations are seen as a necessary part of building a brand for scientific and research organizations (e.g., Mróz-Gorgoń & Całka, 2016). Reputational evaluations of scientific and research organizations differ from those applied to commercial firms, but nevertheless are just as relevant for success (Morschheuser & Redler, 2015). Whereas corporate reputation typically emphasizes product quality and market performance, assessments in scientific contexts are more heavily oriented toward perceived competence, integrity, and legitimacy (Besley & Nisbet, 2013). Stakeholders seek to determine whether an organization produces credible knowledge and adheres to established scientific and ethical norms. As a result, reputation in this domain functions less as a retrospective summary of past accomplishments and more as a forward-looking assessment of anticipated future conduct.

Reputation is most accurately conceptualized as a socially constructed evaluation collectively formed and maintained by relevant stakeholder audiences (Zinko et al., 2007). In the context of scientific and research organizations, these audiences include scientists, peer institutions, funding agencies, policymakers, and other influential groups, each applying distinct evaluative criteria and holding varying interests during the assessment process. Because reputation reflects a shared interpretive judgment, it is unlikely that any single stakeholder group can fully determine an organization's reputational standing. Instead, reputational meanings emerge through the convergence of perspectives generated across multiple, overlapping interpretive communities.

In scientific and research organizations, formal indicators such as publication counts, journal prestige, citation metrics, grant-success rates, and institutional rankings play a significant role in shaping reputational assessments, particularly among expert communities (e.g., Bonaccorsi & Secondi, 2017). However, these indicators are often contested or are only weakly interpreted by non-expert audiences, who may lack the disciplinary background needed to evaluate their meaning and significance (Gołata & Sojkin, 2020). Moreover, such metrics primarily capture historical performance and do

not necessarily signal an organization's future reliability, ethical conduct, or long-term scientific value. As organizations become more visible and influential, stakeholders increasingly rely on informal informational cues to compensate for gaps in understanding, using these signals to form evaluative judgments under conditions of uncertainty.

Research processes are typically complex and not understood fully by all stakeholder groups (Nadkarni et al., 2019). Additionally, causal links between organizational actions and their results are often indirect or are significantly delayed (Bitektine & Haack, 2015). As a result, misconduct, methodological weaknesses, or strategic misalignment may remain unseen by stakeholders for extended periods of time. In such situations, audiences are incentivized to rely upon reputational heuristics, those being socially shared beliefs that simplify the complex evaluations of unique scientific contributions.

In this context, reputation is inherently relational and comparative. Stakeholders seldom evaluate scientific organizations in isolation; rather, they assess them in relation to peer institutions and competing entities within the broader scientific landscape (Rindova et al., 2005). Perceptions of trustworthiness or social responsibility are shaped not only by an organization's actions but also by prevailing narratives that define appropriate conduct within a given field. As new information emerges, these comparative judgments are continually recalibrated, leading to shifting stakeholder expectations over time (Suddaby et al., 2017). Accordingly, reputation in scientific contexts can be understood as an audience-based belief system that enables evaluative decision-making under conditions of incomplete or imperfect information.

## **eWOM Beyond Consumer Markets**

When considering scientific and research organizations, eWOM can be defined as publicly accessible, digitally mediated discourse, generated by heterogeneous stakeholders (e.g., Babić Rosario et al., 2020). It is used to evaluate an organization's research outputs, processes, conduct and the role it plays in society. Differing from consumer-oriented eWOM, which is primarily used to reduce uncertainty about transactional exchanges, eWOM in scientific settings acts as a distributed reputational, internal signal that deals with credibility, anticipated future conduct, and normative legitimacy. It consists of commentary across post publication review platforms, professional blogs, journalistic interpretations, etcetera. In these forums stakeholders interpret and amplify evaluative judgments. Thus, scientific eWOM is a significant issue because it extends reputation formation beyond simple formal public metrics and social legitimacy. As it is continuously negotiated in public digital discussions, stakeholder judgments can reinforce the perception of an organization's standing. Recent work on

post publication peer review shows that these public evaluative practices can shed light on research irregularities, revise existing literature, and contribute to the self-correcting culture of science (e.g., Yeo-Teh & Tang, 2023).

The majority of research regarding eWOM is based upon consumer and service research fields (e.g., Zinko et al., 2020). There, it functions as an informal information exchange guiding purchase decisions and service expectations. In such settings, eWOM is normally conceptualized as peer-generated commentary with the intention of reducing uncertainty about products and services (Babić Rosario et al., 2016). Although this framing has resulted in substantial insight, it limits the theoretical reach of eWOM by anchoring it to transactional decision making and market exchange. Scientific research organizations operate in evaluative environments that are fundamentally different than consumer markets. Stakeholders are rarely given the task of purchasing research outputs in a conventional sense. Instead, they evaluate credibility, loyalty, trustworthiness, ethical conduct, and societal relevance (Raimbault & Joly, 2021). The consequences of these stakeholder evaluations are long term, and they may affect funding decisions, collaboration opportunities, and public legitimacy. This distinction is significant because it positions eWOM in scientific and research organizations not just as a mechanism of consumer choice, but rather as a reputation building process through which stakeholders are able to publicly determine whether an organization deserves continued trust, support, and legitimacy. Recent research regarding trust in science similarly exhibits this perceived integrity, transparency, and institutional conduct as being central to sustaining public trust in scientific organizations (e.g., Varda et al., 2025).

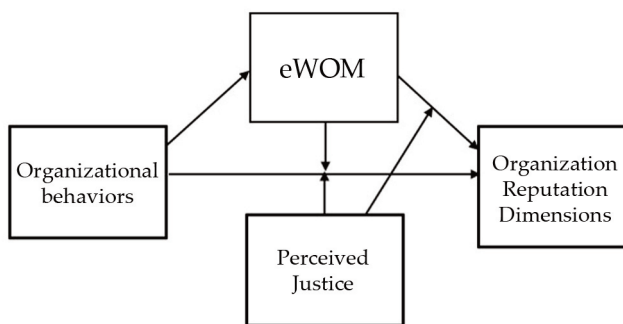
Extending eWOM theory into scientific and research contexts necessitates reconceptualizing eWOM as a broad reputational signal rather than a consumer-oriented heuristic. In these settings, eWOM encompasses a wide range of digital discourse addressing research quality, methodological rigor, and related evaluative considerations. Such exchanges emerge across post-publication peer-review platforms, social media environments, online news commentary, and other digital venues. Accordingly, eWOM in scientific domains centers primarily on interpretive judgments of scholarly claims and organizational behavior, rather than on direct consumer experiences (e.g., Veletsianos & Kimmons, 2016).

A further distinction between consumer-oriented eWOM and eWOM within scientific and research contexts concerns the heterogeneity of the audiences who generate and interpret online information. Consider that eWOM typically involves homogeneous groups. For example, individuals considering the purchase of the same product (who both produce and consume reviews based on comparable experiences). In contrast, eWOM in scientific domains may originate from highly credentialed experts, semi-expert

intermediaries (such as science journalists), and even lay audiences who interpret scientific claims through social, political, or cultural lenses (e.g., Scheufele et al., 2021). These diverse stakeholders introduce a wide range of evaluative perspectives that may converge, reinforce one another, or conflict. Moreover, eWOM in scientific settings is characterized by persistence and amplification, as digital commentary remains publicly accessible long after the initial research activity has taken place, allowing reputational judgements and evaluative narratives to accumulate and resurface over time (Sumba Nacipucha et al., 2024). Highly visible events such as retractions and controversial findings can cause an intense amount of eWOM that may disproportionately affect reputational beliefs, even when formal indicators remain unchanged. This is significant because scientific eWOM is not simply a collection of reactions to research outputs. Instead, it is an ongoing reputational arena in which different stakeholder groups publicly negotiate the means, credibility, and legitimacy of scientific work overtime. In doing so, public trust in science is shaped by competing information sources, stakeholder interpretation, and visible disputes over scientific credibility (Reif et al., 2024).

## eWOM Beyond Consumer Markets

Research shows that reputational judgments are rarely a result of a single authoritative evaluation or formalized assessment. Instead, they are acquired through an accumulation of evaluative signals (Zinko et al., 2012). These signals are distributed across multiple audiences and stakeholders. eWOM can serve as a mechanism through which information is dispersed, gathered, interpreted, and translated into shared reputational beliefs.



**Figure 1.** Distributed eWOM and Reputation Formation in Scientific and Research Organizations.

Figure 1 presents the proposed conceptual model that links organizational behaviors, E Wong, perceived justice, and organizational reputation dimensions. The model begins

with organizational behaviors. These represent the actions, decisions, policies, and conduct that stakeholders observed or were made aware of through formal and informal channels. Such behaviors may influence organizational reputation directly, but they may also affect the perception of others indirectly through eWOM. As such, functions of the public interpretive mechanism through which organizational actions are discussed, evaluated, and circulated among stakeholders are important. Furthermore, the model proposes that eWOM has a direct relationship with organizational credibility, trustworthiness, ethical conduct, competence, and social relevance. This is done by making particular interpretations more visible and durable. At the same time, eWOM also interacts with perceived justice. Stakeholders do not interpret online commentary from a vacuum. Rather, they evaluate whether the organization's actions appear fair and transparent regarding affected parties. Therefore, perceived justice shapes how eWOM is interpreted and whether it is viewed as legitimate signaling of organizational character.

Perceived justice also has a direct relationship with organizational reputation dimensions. As stakeholders perceive that an organization has acted in a fair manner, they are more likely to evaluate the organization favorably. This may even occur when negative information is present. Perceived injustice can intensify reputational damage by causing stakeholders to interpret organizational behaviors and relate them to eWOM as evidence of a potential deeper problem. As such, the model suggests that reputation formation in scientific and research organizations are not solely driven by organizational behavior. Instead, reputation formation is a result of interactions between actual conduct, public digital interpretation, and stakeholder judgments of fairness.

eWOM operates as a distributed process of evaluation among audiences, with individual stakeholders observing signals such as research outputs, public statements, collaborations, or controversies (Eisingerich et al., 2015). These fragments are then coalesced into a more stable reputational narrative regarding the individual in question. This process is inherently social. When a stakeholder makes an evaluative statement about an individual it can be circulated and adopted by others. As certain interpretations are echoed across audiences, they acquire legitimacy and salience, even in the absence of observable evidence (Suddaby et al., 2017). Conversely, alternative interpretations may be discounted if they fail in consistency towards prevailing expectations or dominant narratives. In this way, eWOM does not simply transmit information about an individual; but rather, it actively constructs meaning.

Reputational transference within scientific and research contexts incorporates a broad array of evaluative criteria. Expert audiences often emphasize dimensions such as methodological rigor and theoretical contribution, whereas non-expert stakeholders may concentrate on ethical conduct, transparency, or perceived social impact. eWOM facilitates

the coexistence and interaction of these distinct evaluative logics by circulating and amplifying reputational assessments across digital platforms. Through this process, dispersed subjective judgments are aggregated into more stable collective beliefs (Grange & Benbasat, 2018). Although individual evaluations may be idiosyncratic, repeated exposure to similar assessments from multiple independent sources increases the likelihood that stakeholders will interpret these judgments as reflecting a shared consensus (Babić Rosario et al., 2020). Over time, the shared consensus behaves as a reputational heuristic that guides stakeholder expectations about future behavior, reliability, and trustworthiness. Through such a lens, eWOM can be understood as a mechanism that converts, and dispenses socially embedded evaluations into stable reputational beliefs. As such, reputations are not built solely through affordable achievement, but rather ongoing interpretive processes embedded in digital discourse.

Proposition 1: The volume and consistency of eWOM regarding a scientific or research organization are positively associated with the convergence of stakeholder evaluations into shared reputational beliefs.

Proposition 2: Repeated exposure to similar evaluative judgments from multiple independent digital sources increases the perceived legitimacy of those judgments and strengthens their influence on reputational formation.

## **Uncertainty, Limited Observability, and the Rise of eWOM**

As scientific and research organizations operate under conditions of persistent uncertainty and limited observability; the quality, integrity, and long-term value of research outputs are often difficult to assess by audiences. Scientific reader rigor may only become apparent through replication or extended scrutiny, over extended periods of time (Nosek et al., 2022). As a result, stakeholders rarely possess the complete information that is needed to develop accurate evaluations. Such limited observability further complicates reputational assessments by audiences.

Formal performance indicators provide only limited insight into organizational quality because they privilege observable outputs over the processes that produce them. This opacity encourages stakeholders to rely on indirect cues when inferring an organization's competence, intent, and long-term reliability (Babić Rosario et al., 2020). Under such conditions, electronic word-of-mouth (eWOM) becomes a critical sense-making mechanism. Informal digital discourse enables stakeholders to exchange interpretations, articulate concerns, and signal confidence or skepticism in ways that compensate for

informational gaps (e.g., Furner et al., 2022). Consequently, rather than evaluating scientific organizations solely on measurable outcomes, audiences draw upon circulating narratives, endorsements, criticisms, and comparative judgments that populate digital environments. These interpretive narratives help reduce uncertainty by providing socially meaningful accounts of incomplete or ambiguous information.

The influence of eWOM is further amplified by the stakes associated with scientific credibility and legitimacy: decisions related to funding, collaboration, and public trust depend not only on technical performance but also on expectations of future ethical conduct and reliability (Bozeman & Youtie, 2017). In situations where outcomes are difficult to interpret, stakeholders place greater weight on reputational signals that reflect collective rather than isolated judgment. Importantly, eWOM does not eliminate uncertainty; instead, it transforms ambiguity into shared expectations and interpretive heuristics. Through repeated exposure to consistent evaluative messages, stakeholders form beliefs about how an organization is likely to behave in the future, even when direct evidence remains incomplete. In this way, eWOM operates as a heuristic device that facilitates decision-making under conditions of uncertainty.

**Proposition 3:** The influence of eWOM on reputational formation is stronger under conditions of high uncertainty and limited observability than under conditions of transparent and easily verifiable performance outcomes.

**Proposition 4:** When formal performance indicators are perceived as incomplete or difficult to interpret, stakeholders rely more heavily on eWOM signals in forming reputational judgments.

## **Dimensions of eWOM-Based Reputation**

The formation of a reputational judgment by an audience is not monolithic. Instead, audiences tend to evaluate scientific and research organizations along multiple dimensions (Redler & Morschheuser, 2024). These images reflect specific expectations about how behaviors and future conduct will occur. Developed upon prior reputation and organizational research, we present three interrelated dimensions: competence, social contribution, and integrity. Taken together, these dimensions capture the core evaluation concerns that guide stakeholder judgments during times of uncertainty.

Competence reputation is seen as an audience's beliefs about an organization's scientific capacity, expertise, and ability to produce reliable outcomes (Connelly et al., 2018). eWOM contributes to competence assessments through discussion of

methodological rigor, innovation, consistency of findings, and how well the company aligns with established scientific standards. Endorsements by well-known experts, citations in journals, and positive evaluations of resource quality can serve as signals that reinforce perceptions of competence. Alternatively, criticisms of such aspects can undermine competency reputation even when formal output measures remain consistent.

Social reputation dictates whether an audience views an organization as contributing positively to the collective knowledge of science, as well as to broader societal goals (e.g., Giannarakis et al., 2016). This dimension reflects perceptions of collaboration, openness, and the ability to work towards a constructive end with others. eWOM is central to this in that it shapes social reputation by highlighting ways in which organizations engage with peers, respond to criticism, share data, and participate in interdisciplinary or public-facing initiatives. Organizations that are seen as cooperative, communicative, and oriented towards others' goals are more likely to be perceived as desirable partners and responsible members of the scientific community.

A reputation of integrity reflects moral evaluations concerning such constructs as honesty, fairness, and adherence to scientific and ethical norms (Zinko et al., 2016). In this context, integrity is foundational to trust and legitimacy, yet it can often be difficult to directly observe. eWOM contributes to integrity assessment by providing a platform through which narratives about transparency, conflicts of interest, concerns, and responses to errors can be examined. Allegations of questionable research practices and ethical lapses can rapidly decrease integrity reputation. Alternatively, a visible and consistent commitment to ethical standards and accountability can strengthen perceptions of organizational integrity.

Although these three dimensions are analytically distinct, they are empirically intertwined. Positive perceptions in one dimension may buffer a perceived weakness in another (Lee & Abdullah, 2024). Likewise, failures, particularly regarding integrity of reputation, can disproportionately damage a stakeholder's perception of overall reputation. By structuring reputational judgments along these dimensions, eWOM gives an avenue for audiences to form nuanced beliefs about scientific and research organizations. This extends beyond simplistic assessment of performance and allows for richer interpretations of organizational character as well as future behavior.

**Proposition 5a:** Positive eWOM emphasizing methodological rigor and scientific capability is positively associated with competence reputation.

**Proposition 5b:** Negative eWOM emphasizing methodological weakness or inconsistency is negatively associated with competence reputation.

Proposition 6a: Positive eWOM emphasizing collaboration, openness, and societal engagement is positively associated with social contribution reputation.

Proposition 6b: Negative eWOM emphasizing social irresponsibility or isolation is negatively associated with social contribution reputation.

Proposition 7a: Positive eWOM emphasizing transparency and ethical conduct is positively associated with integrity of reputation.

Proposition 7b: Negative eWOM emphasizing misconduct or unfair practices is negatively associated with integrity of reputation.

Proposition 8: Negative eWOM related to integrity exerts a stronger negative effect on overall reputation than negative eWOM related to competence or social contribution.

## **Organizational Justice and the Legitimacy of eWOM**

Organizational justice is defined as a stakeholder's perception that decision processes, evaluated procedures and interpersonal treatments with scientific and research organizations are seen as fair, transparent, and appropriate (i.e., within the context of societal norms and expectations) (Mubashar et al., 2022). This construct includes procedural justice (i.e., fairness in decision rules and processes), interactional justice (i.e., respect and transparent communication) and distributive justice (i.e., perceived fairness of outcomes such as recognition, funding, or authorship) (Colquitt et al., 2001). Within this framework, organizational justice acts as a legitimacy lens through which eWOM signals are interpreted. When justice perceptions are high, stakeholders are more likely to view evaluated discourse as credible and reflective of underlying organizational qualities. Alternatively, when justice perceptions are low, stakeholders can discount both positive and negative eWOM as being politically motivated, strategically manipulated, or structurally biased.

Organizational justice operates in this framework not merely as a contextual variable but, more importantly, as a moderating and interpretive mechanism. Specifically, justice perceptions affect how stakeholders attribute meaning to observed eWOM signals. When stakeholders perceive decision processes and interpersonal treatment as fair and appropriate, they are more likely to see eWOM as diagnostic of underlying organizational characteristics. Conversely, when justice perceptions are low, audiences are more likely to attribute eWOM messages to politics, manipulation, or structural bias. In this way, justice perceptions moderate the credibility and weight assigned to eWOM. In doing so,

organizational justice shapes the strength of eWOM's influence on confidence, social contribution, and integrity reputations.

Although eWOM plays a vital role in the development of reputational beliefs, audiences do not see all reputational signals as being equally legitimate. The extent to which eWOM is seen as informative, versus arbitrary or politically distorted, is affected by perceptions of organizational justice. Such justice views affect whether stakeholders interpret reputational discourse as an accurate assessment of organizational behavior, or as noise driven by bias, power, or opportunism (Bouazzaoui et al., 2020). As such, organizational justice provides a normative framework through which reputational signals can be evaluated. When audiences believe that decision processes within scientific and research organizations are transparent, consistent, and procedurally fair, reputational signals via eWOM are more likely to be interpreted as accurate indicators of underlying organizational qualities. Alternatively, perceptions of favoritism or politicalization can lead stakeholders to discount eWOM as being unreliable or strategically motivated.

Procedural justice is particularly salient in how audiences assess organizational reputation. When stakeholders perceive that internal evaluation processes are governed by clear, transparent, and consistently applied rules, eWOM that aligns with these procedures is more likely to be viewed as credible (Colquitt et al., 2001). Conversely, when formal processes appear flawed, opaque, or subjective, eWOM may be interpreted as a space in which competing narratives and power dynamics play out. Respectful communication, responsiveness to criticism, and acknowledgment of stakeholder concerns expressed through eWOM can further signal that an organization values fairness and accountability. In such contexts, negative eWOM may be interpreted as constructive critique rather than as a reputational threat. However, when interactional justice is perceived to be lacking, even well-founded reputational concerns may be dismissed as politically motivated or biased.

It is important to note that justice perceptions shape audience responses not only to negative eWOM signals but also to positive ones. Praise and endorsement may be discounted if stakeholders believe that recognition is distributed unevenly or strategically. Accordingly, organizational justice functions as a critical interpretive lens through which reputational signals are assessed, enabling stakeholders to determine whether eWOM reflects legitimate evaluations of organizational behavior or merely strategic image management.

**Proposition 9:** Perceptions of organizational justice positively moderate the relationship between eWOM and competence, social contribution, and integrity reputations, such that eWOM signals are interpreted as more credible when justice perceptions are high.

Proposition 10: When perceptions of organizational justice are low, stakeholders are more likely to discount both positive and negative eWOM as strategically motivated or biased, thereby weakening its influence on reputational formation.

## **Implications for the Marketing of Scientific and Research Organizations**

This framework is most applicable in a context characterized by high uncertainty, limited observability of foundational work processes, and audiences consisting of different heterogeneous stakeholder groups. Scientific and research organizations that operate in fields where methodological complexity, delayed outcomes, and ambiguity of results are common, can represent ideal conditions for this model. In such environments, stakeholders lack direct access to evaluative criteria and, therefore, must rely more heavily on publicly accessible digital discourse to form reputational beliefs. This framework is specifically relevant when organizations are embedded in digitally visible ecosystems in which post publication review, social media, online commentary, journalism, and professional blogging can generate persistent and cumulative evaluative narratives. In contrast, the framework is least applicable in contexts where performance outcomes are highly transparent, stable, and immediately observable. In such settings, where situations are understood and uncontested, stakeholders have less of a need to rely on the information that eWOM offers.

For appropriate organizations, eWOM as a mechanism of reputation formation carries important implications for how scientific and research organizations are marketed and positioned. In this context, marketing communication extends beyond branding, visibility, or the dissemination of research outputs. Rather, eWOM involves shaping how organizations are interpreted, evaluated, and trusted by diverse stakeholder groups over time. Digital discourse thus becomes a critical arena in which evaluative interpretations are generated, reinforced, and contested.

First, the findings suggest that formal performance indicators alone are insufficient for cultivating a positive reputation. Although metrics such as citation counts, rankings, and grant success remain valuable, they do not fully capture the evaluative concerns that guide stakeholder judgments during periods of uncertainty. Marketing strategies that overlook informal evaluative discourse risk neglecting a key source of reputational development. Effective reputation management therefore requires systematic attention to how organizational actions are discussed, framed, and interpreted by stakeholders across digital environments.

Second, scientific and research organizations face the challenge of engaging heterogeneous audiences that all hold different evaluative priorities. eWOM holds the ability to integrate expert and non-expert perspectives. This results in a reputational narrative that can reflect a blend of technical assessments and value-based judgments. Marketing efforts must account for this complexity and communicate organizational confidence without alienating or overstimulating unintended stakeholder groups. This is achieved by signaling integrity and social contributions in ways that resonate across a variety of audiences.

Third, the persistent visibility of eWOM underscores the long-term nature of reputational marketing. Digital discourse does not simply dissipate. Past evaluations can resurface and affect current audience judgments. Such a dynamic focuses on the importance of consistency in organizational behavior and communication. Short-term reputational gains through selective messaging may not produce positive outcomes if they are undermined by subsequent actions contradicting established narratives.

Finally, ethical considerations are a central focus. If discovered, attempts to strategically influence eWOM through selective amplification, suppression of criticism, or manipulation of online discourse can risk damaging the overall integrity reputation of the organization. As scientists communicate and collaborate, where trust and legitimacy are at the forefront; marketing approaches must align with norms of transparency, accountability, and the ability to receive critical evaluation. Taken together, such implications reveal the marketing of science and research organizations as an ongoing process of reputation stewardship, rather than image management. By utilizing eWOM as a core mechanism through which reputation and beliefs are formed, organizations can better understand how trust, legitimacy, and support are developed and maintained in the contemporary digital environment.

## Conclusions

This paper advances the argument that eWOM functions as a central mechanism through which reputations of scientific and research organizations are formed in contemporary environments. Given the prominent levels of uncertainty and limited observability that characterize scientific work, stakeholders cannot rely solely on formal performance indicators to evaluate an organization's quality, integrity, or anticipated future conduct. Instead, they turn to informal evaluative discourse to construct shared beliefs about organizational behavior. By conceptualizing eWOM as a process of distributed reputational formation, this framework illustrates how fragmented judgements from heterogeneous audiences can be consolidated into stable reputational

narratives. These narratives extend beyond assessments of competence to encompass perceptions of social contribution, integrity, trustworthiness, and legitimacy. In doing so, the framework positions the marketing of scientific and research organizations not as the management of image or visibility, but as the stewardship of reputational meaning within evolving digital environments.

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