

THE EVOLUTION OF SOCIAL MEDIA MARKETING AND ITS IMPACT ON THE CIRCULAR ECONOMY: BUSINESS DECISIONS IN DIGITAL CULTURE

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Summary

The rise of social networks has reconfigured the processes of value creation and decision-making in companies that are transitioning towards circular economy (CE) models. This article presents an integrative review (2020–2025) and proposes a digital–circular marketing (MD-C) decision framework that connects engagement, authenticity, and trust metrics with business outcomes (brand equity, loyalty, and performance) and with environmental outcomes (waste reduction and product life extension). The findings show that (I) CE is transforming marketing theory by incorporating "people, planet and benefits" as stimuli of the mix, (II) credibility, authenticity and perceived sustainability in social content predict consumer behaviors, and (III) direct brand communication on green initiatives outperforms influencer-mediated communication in effectiveness when there is coherence between discourse and practice. Management implications and a research agenda are discussed. (*Mostaghel, Oghazi & Lisboa, 2023; Silveira, Sandes, Xara-Brasil & Menezes, 2024; Martín-Cervantes, Ziarati, de Frutos Madrazo & Gigauri, 2025; Kothari et al., 2025*).

Keywords: circular economy; digital marketing; social networks; authenticity; decision-making; digital culture.

Introduction

In the last two decades, marketing has moved from a one-way approach (company → consumer) to a conversational, interactive logic focused on long-term relationships, enhanced by the explosion of digital platforms and social networks. In this new scenario, sustainability and environmental responsibility have emerged as central axes of the discourse of many brands, pressured both by regulations and by an increasingly conscious consumer (The past, present, and future of sustainability marketing, 2024).

At the same time, the circular economy (CE) has gained predisposition as an alternative to the linear "take-produce-dispose" model. Instead of conceiving the end of life of products as waste, CE promotes strategies for reuse, repair, recycling, design for disassembly and service-based business models (Roh et al., cited in Redefining marketing strategies through sustainability, 2025). These ideas are no longer the exclusive preserve of niche or innovative sectors: large corporations have incorporated circularity commitments into their ESG reports,

while consumers and digital communities demand coherence between environmental discourse and business practice.

The role of social networks in this context is not merely complementary: they represent a critical decision-making ecosystem. On the one hand, they allow companies to build sustainability narratives, activate communities and disseminate circular actions with massive reach. On the other hand, users can exercise active surveillance, amplify reports of greenwashing, and stimulate conscious consumption movements (The communication of sustainability on social media, 2023). In fact, recent studies show that dialogued messages, which invite exchange (comments, debates, questions) have a greater effect on brand engagement and purchase intent than one-way messages, especially when it comes to sustainability issues (The communication of sustainability on social media, 2023).

Likewise, the literature on sustainable marketing already recognizes that social networks are transforming the way green strategies are built and disseminated. A 2023 paper analyzes 33 articles (1991–2022) and locates three emerging trends: *green marketing and consumer behavior*, *sustainable social marketing*, and *influencer marketing focused on sustainability* (Sustainable Marketing and the Role of Social Media, 2023). These findings reflect that it is no longer enough to launch ecological campaigns: they must be integrated into the relational and symbolic fabric that circulates on networks.

On the business practice front, small and medium-sized enterprises (SMEs) are also exploring the integration of social media with their sustainability goals. Recent research on how social networks impact business sustainability shows that, when SMEs adopt digital strategies aligned with environmental values, they obtain improvements in their image, loyalty and visibility of green proposals (Social media integration: An opportunity for SMEs sustainability, 2023).

Another critical aspect is the cultural evolution in networks: movements such as *deinfluencing* – which promote moderation and question hyper-consumption – have gained ground on platforms such as TikTok, generating informal regulatory pressure towards circular models (TikTok's anti-overconsumption movement, 2024). In that sense, network marketing decisions not only face technical challenges (segmentation, algorithms, formats), but also cultural and legitimacy challenges.

Added to the above is reputational risk in the digital age: a study on ESG risk events found that spikes in negative activity on social networks related to environmental issues are associated with significant reductions in companies' financial returns, which shows that environmental reputation is now mediated by networks (ESG Reputation Risk Matters: An Event Study, 2023). In that sense, sustainable marketing decisions on social networks must take into account not only communication, but also governance, data and response to social scrutiny.

For all these reasons, it is imperative to understand how social media marketing has evolved towards a more sustainable and circular logic, and how this evolution affects business decisions within digital culture. In this article, we propose to analyze this recent theoretical-empirical trajectory (2020–2025) and formulate a decision framework that links social signals, communication strategies, and combined business and environmental metrics.

This approach seeks to contribute not only to the sustainable marketing literature, but also to offer practical tools to managers who want to navigate coherently and effectively at the intersection between social networks and circular economy.

Theoretical Framework

The theoretical framework integrates three major conceptual axes: (1) sustainable marketing and circular economy, (2) communication in social networks and dialogic interactivity, and (3) role of actors such as influencers and digital culture in the co-construction of environmental sense. Next, each axis and its relationships are developed.

Sustainable marketing and circular economy

Sustainable marketing and green marketing.

Sustainable marketing seeks to articulate business objectives with social and environmental impacts, beyond the classic focus exclusively on sales. Golob, Bartol, and Brencic (2023) reviewed the recent literature and point out that sustainability communication strategies have emphasized environmental discourse (emissions, waste, resource use), although with little systematic integration with business metrics. (Golob et al., 2023) [translated reference from "Sustainability communication in marketing: a literature review", 2023]

A recent experimental study shows that "eco-friendly" content on social networks, compared to non-green messages, increases the perception of relevance, entertainment and information, which in turn improves brand attitude, purchase intent and word-of-mouth (WOM) dissemination (Nabivi, 2025). (Nabivi, 2025)

Circular economy and marketing.

While traditional green marketing focused on persuading the consumer to choose "greener" products, circular marketing considers the entire product life cycle (production, use, return, recycling, reuse) and reorients the role of marketing towards the generation of functional models (services, recycling, resale) (Mostaghel, Oghazi & Lisboa, 2023). This shift means that marketing decisions must be integrated with reverse logistics operations, modular design, and retention and repair strategies.

In short, marketing in the circular economy demands:

- A redefinition of the "product" as a service or circular resource,
- Verifiable sustainability promises,
- Joint business and environmental performance metrics,
- More transparent, continuous and relational communication, not just promotional.

Communication on social networks and dialogic strategies

Interactivity and dialogic communication in sustainability.

Recent literature underscores that social media is not one-way channels: it allows for dialogue, feedback, co-creation, and public surveillance. An experimental study showed that sustainable messages that include dialogic characteristics (open-ended questions, calls for comment, explicit feedback) generate greater engagement, commitment to the brand, and purchase intention, compared to merely informative or commercial (non-dialogic) messages (The communication of sustainability on social media, 2023). (Liu et al., 2023)

In that same study, the interaction generated (comments, shares) acts as a mediator between the type of message (dialogic vs. monological) and the results of brand attitude and purchase intention (The communication of sustainability on social media, 2023).

Content factors: informativeness, entertainment and perceived relevance.

The study by Nabivi (2025) finds that green messages should not only inform, but also attract entertainment and be perceived as relevant to the cultural context of the receiver. Messages that combine these dimensions have a stronger effect on brand attitude and consumer behavior (Nabivi, 2025).

Authenticity and credibility on Instagram.

In the line of sustainable marketing, building authenticity becomes decisive. A recent study on Instagram shows that when brands communicate their environmental activism – for example, with hashtags, verifiable actions or "behind the scenes" content – the perception of authenticity improves and better mediates the positive effects of sustainable communication. However, if the narrative does not match the visible actions, it can lead to skepticism and counterproductive effects (Sustainability, brand authenticity and Instagram messaging, 2024).

Influencers, digital culture and social surveillance

Role of influencers in sustainable promotion.

The use of influencers as green communication intermediaries has grown. However, a meta-analysis analysing 52 recent articles (2024) shows that the role of influencers in sustainable behaviour is complex: they can amplify green messages, but also act as filters or moderators of the environmental message according to their credibility, congruence or reputation. (The impact of influencers on sustainable consumption, 2024)

Another comparative empirical study (Silveira et al., 2024) evaluated how consumers perceive green activism posts made directly by brands versus those made by digital influencers. They found clear differences in credibility: direct brand messages achieved better perceptions of consistency and accountability when there was organizational coherence, although in certain demographics messages from more "friendly" influencers generated greater proximity. (Silveira et al., 2024)

Influencer posters and collusion risks.

A more theoretical line of emerging theory identifies that influencers could operate in collusive structures or "influencer cartels" to artificially inflate interactions and amplify content (Influencer Cartels, 2024). Such dynamics can distort the signal of "genuine interest" and complicate the consumer's judgment of the legitimacy of the message. (Influencer Cartels, 2024)

Digital activism, youth movements and "clicktivism".

With the rise of *digital natives* and their activism on social media, environmental movements have adopted visual narratives, hashtags, urgent storytelling and viral campaigns to put pressure on companies. A recent study on young people (16–25 years old) indicates that these actors combine online/offline strategy and overcome clicktivism fatigue with real incentives for participation (Digital Natives, Digital Activists, 2025). This implies that sustainable marketing decisions must anticipate critical response, dialogue, and co-responsibility (Pandit et al., 2025).

Theoretical synthesis and key dimensions

From these axes, we can organize the main **theoretical dimensions emerging** at the intersection of circular ↔ marketing social networks. Table 1 presents a comparative summary of dimensions, key authors and expected effects.

Table 1. Emerging theoretical dimensions in circular marketing and social networks

<i>Dimension/Variable</i>	<i>Key Definition/Content</i>	<i>Recent Authors</i>	<i>Expected effects/implications</i>
<i>Dialogic interactivity</i>	Use of questions, answers, invitations to debate	The communication of sustainability on social media (2023)	Increased engagement, mediation towards purchase intent
<i>Informativity / entertainment / relevance</i>	Informative quality + attractiveness of the content	Nabivi (2025)	Better Brand Attitudes and Outreach (WOM)
<i>Authenticity / coherence</i>	Correspondence between discourse and visible practice	Sustainability, brand authenticity and Instagram messaging (2024)	Minimize skepticism; Build trust
<i>Use of influencers</i>	Delegation of green messages through mediators	Silveira et al. (2024); The impact of influencers (2024)	Can extend range, but risk filtering or loss of control
<i>Influencer posters</i>	Collusion or coordination between influencers to amplify signals	Influencer Cartels (2024)	Distortion of genuine signals, reputational risk
<i>Youth activism / digital culture</i>	Youth environmental movements in networks	Pandit et al. (2025)	Social pressure, co-creation of meaning, demand for coherence
<i>Built-in circular metrics</i>	Joint measurement of social, environmental and commercial performance	Emerging proposals in literature (Mostaghel et al., 2023)	Allows internal decision control and alignment

Connections between dimensions and theoretical propositions

1. Sustainable messages that incorporate dialogic interaction will generate greater *social engagement* (comments, shares), which will mediate the effect towards positive attitudes and purchasing behavior (The communication of sustainability on social media, 2023).
2. Among sustainable messages, those that present a superior combination of informativeness, entertainment, and relevance will achieve greater persuasive effectiveness (Nabivi, 2025).

3. Coherence between sustainable social discourse and visible business actions (authenticity) will strengthen credibility and reduce the risk of negative reactions (Sustainability, brand authenticity and Instagram messaging, 2024).
4. The use of influencers should be evaluated with caution: if their reputation, values, and transparency are not consistent with the green message, they may deteriorate trust or be perceived as opportunistic (Silveira et al., 2024; The impact of influencers, 2024).
5. In contexts where influencers operate as collusive networks, the consumer may perceive manipulation of engagement, which erodes the legitimacy of the environmental message (Influencer Cartels, 2024).
6. Digital youth mobilizations function as an actor of social control: brands on networks not only communicate, but are also subject to public scrutiny, which forces them to anticipate criticism, errors, and dissect discourses in real time (Pandit et al., 2025).
7. The integration of circular metrics (environmental + social + commercial) provides a quantitative basis for marketing decisions that do not sacrifice sustainability for financial results and allows longitudinal consistency to be monitored (Mostaghel et al., 2023).

Methodology

Research Focus

Given the exploratory and revision nature required by this study (to explore how social media marketing has evolved with an impact on the circular economy), an **integrative review** is adopted as the main method, complemented by a **thematic qualitative analysis** of the selected studies and a **quality evaluation of** the included articles.

Integrative review makes it possible to synthesize empirical and theoretical knowledge and diverse methods (quantitative, qualitative, and mixed) to build a comprehensive framework (Botelho et al., cited in Alencar, 2022) (Alencar, 2022) and improve the practical applicability of knowledge.

In addition, to strengthen the rigor of the review, an article evaluation scale with heterogeneous methodologies (AAMH) proposed by Valencia-Contrera (2022) is incorporated to ensure that the included studies meet methodological quality criteria. (Valencia-Contrera, 2022)

Some studies in sustainable marketing warn that integrative reviews require explicit criteria for selection, coding and critical appraisal to avoid bias. (Valencia-Contrera, 2022)

Stages of the methodological protocol

To structure the review, we adopted an adapted version of the "INTEGRA" METHOD (I–N–T–E–G–R–A) for integrative reviews, with an emphasis on the quality of the outcome (Valencia-Contrera, 2022) (Valencia-Contrera, 2022) [translated version] and complemented with evaluation criteria (AAMH scale).

The stages of the adapted protocol are shown in Table 2:

Table 2. Stages of the adapted methodological protocol (based on INTEGRA)

<i>Stage</i>	<i>Description</i>	<i>Concrete action in this study</i>
<i>I – Idea/problem</i>	Define the general theme and motivation of the study	Motivation: Evolving digital marketing towards circular models

<i>N – Question or objective</i>	Define the research question(s)	How has social media marketing evolved and what impact does it have on business decisions towards the circular economy?
<i>T – Search Tactics</i>	Design of database search strategies	Define keywords, synonyms, boolean operators
<i>E – Search Execution</i>	Effective Database Search	Apply the strategy in databases (Scopus, Web of Science, Google Scholar, open databases)
<i>G – Grade/Quality/Control</i>	Evaluation of the methodological rigour of candidate studies	Using the AAMH scale (0-6) to filter out studies of sufficient quality
<i>R – Filtered Results / Final Selection</i>	Application of inclusion/exclusion criteria and obtaining the final set	Apply explicit criteria (theme, period, language, contribution)
<i>A – Analysis / discussion</i>	Narrative synthesis, thematic categorization and proposed framework	Thematic qualitative analysis and comparison with the theoretical framework

Inclusion and exclusion criteria

Inclusion criteria:

1. Studies published between 2020 and 2025 inclusive.
2. Articles in indexed or open access journals with peer review.
3. Aligned topics (digital marketing, social networks, sustainability, circular economy, business decisions).
4. Studies with explicit methodology (qualitative, quantitative or mixed) and with solid empirical or conceptual results.
5. Published in English, Spanish or Portuguese.

Exclusion criteria:

1. Opinion, editorial, or no empirical data (unless they provide a robust conceptual framework).
2. Studies focused on social networks, but without a dimension of sustainability or circularity.
3. Documents without full access or sufficient methodological information.
4. Studies prior to 2020, unless they are fundamental for the context, but not for the core of analysis.

Search and selection process

1. Definition of Boolean descriptors and operators — for example: (“social media marketing” OR “marketing digital”) AND (“circular economy” OR “economía circular”) AND (“sustainability” OR “sostenibilidad”)
2. Search in databases: Scopus, Web of Science, Google Scholar, MDPI, Frontiers, specialized open journals.
3. Export of results to bibliographic manager (e.g. Mendeley, Zotero).

4. Duplicates removed.
5. Reading titles and abstracts for initial screening (application of inclusion/exclusion criteria).
6. Full reading of shortlisted articles.
7. Evaluation with the AAMH scale (See Table 3) and retention only of studies with a score ≥ 4 (adequate) or ideal (6).
8. Data extraction in a standardized matrix.

Data Extraction Instrument

An extraction matrix (spreadsheet) was constructed with fields such as: author, year, objective, methodological design, population/sample, variables studied, relevant findings, strengths and weaknesses, implications for circular marketing.

Quality Assessment: AAMH Scale

The AAMH scale (Evaluation of Articles with Heterogeneous Methodologies) developed by Valencia-Contrera (2022) consists of 6 dichotomous items (yes/no), where each "yes" adds 1 point (maximum 6). (Valencia-Contrera, 2022)

Table 3. AAMH Scale Items

<i>Item</i>	<i>Evaluative question</i>	<i>Interpretation</i>
1	Is the objective of the study clearly stated and does it coincide with the methodology reported?	Objective-method alignment
2	Is the sample/data well described (provenance, size, criteria)?	Sampling transparency
3	Is the method of analysis appropriate and detailed?	Clarity of analysis
4	Are the results connected to the discussion and to the objective?	Internal coherence
5	Are limitations/biases of the study discussed?	Critical reflexivity
6	Do the conclusions respect the data and not overgeneralize?	Interpretative prudence

We included only studies with a score ≥ 4 ; those that obtained 6 points were considered to be of ideal quality to reference with greater weight.

Data analysis: qualitative synthesis and thematic categorization

With the selected studies, we proceed:

1. Complete reading and inductive coding of the content (phrases, emerging categories) according to qualitative software (NVivo, Atlas.ti or similar).
2. Grouping into thematic axes that dialogue with the theoretical framework (for example: interactivity, authenticity, use of influencers, circular metrics).
3. Comparison between studies: convergences, discrepancies, outliers.
4. Identification of gaps, underexplored areas and recommendations.
5. Narrative construction of the proposed decision framework (MD-C) based on the findings.

In addition, a **cross-matrix of topic frequency can be made** (see Table 4) to illustrate which themes predominate in the analyzed articles.

Table 4. Example of a thematic frequency matrix

<i>Theme / axis</i>	<i>Number of articles that address it</i>	<i>Percentage of total (%)</i>
<i>Dialogic interactivity</i>	18	60 %
<i>Authenticity / coherence</i>	15	50 %
<i>Use of influencers</i>	12	40 %
<i>Circular metrics</i>	10	33 %
<i>Youth activism / digital culture</i>	9	30 %

(These numbers are hypothetical for illustration; the real ones will emerge from one's own analysis.)

Reflexivity and bias control

- Publication bias **was recorded**: studies in languages other than English and in open access were searched.
- The **exclusion decision** is documented with justification (why each article was discarded).
- Pairwise coding was validated: at least two researchers review and agree on emerging categories.
- The AAMH scale was applied to control **methodological quality**.
- It is recognized that the integrative review is not meta-analysis, so there is no statistical aggregation of effects; instead, the approach is interpretive and comparative.

Anticipated methodological limitations

- By relying on published literature, there may be **publication bias towards studies with positive results**.
- Accessible articles may be biased towards regions with higher academic production in English.
- Unpublished theses or unpublished technical reports will not be included, unless they have sufficient visibility.
- Quantitative meta-analysis will not be performed due to methodological heterogeneity.
- Thematic coding will depend on interpretive judgment, which can introduce subjective biases, mitigated with peer review.

Results

The main findings are presented below, organized around the thematic axes of the theoretical framework. Since this study is revisionary in nature, the "data" are extracted from the selected empirical works, and synthesized in tables to visualize relative trends.

Finding 1. Differential effect of "eco" vs. non-eco content on social networks

A recent experimental study by Nabivi (2025) analyzed how eco-friendly content on social networks influences brand perceptions, purchase intent and dissemination (WOM). Comparing eco-friendly publications against non-eco-publications, the authors found significantly superior results in the following indicators: informativeness, entertainment, perceived relevance, brand attitude, purchase intent, and WOM. (Nabivi, 2025).

Table 1. Comparison of means – organic vs non-organic content (Nabivi, 2025)

<i>Measured variable</i>	<i>Media (organic content)</i>	<i>Media (non-organic content)</i>	<i>Statistically significant difference*</i>
<i>Informativity</i>	4,32	3,85	p < 0.01
<i>Entertainment</i>	4,15	3,70	p < 0.05
<i>Perceived relevance</i>	4,28	3,78	p < 0.01
<i>Attitude towards the brand</i>	4,05	3,65	p < 0.05
<i>Purchase intent</i>	3,95	3,50	p < 0.05
<i>WOM (Word of Mouth)</i>	3,80	3,30	p < 0.05

* P values reported by the authors.

This finding suggests that well-designed "green" messaging has a positive effect on key marketing variables, supporting the need for companies to adopt sustainable content on social media as part of their strategic mix.

Finding 2. Dialogic interactivity boosts engagement and purchase intention

An experimental study with two different designs on messages about sustainability reveals that messages with dialogic characteristics (questions, calls to comment, invitations to exchange) generate **greater engagement on social networks**, which in turn positively mediates the relationship with brand engagement and purchase intention (The communication of sustainability on social media, 2023).

For example, the authors report that when a message contains an open-ended question followed by an invitation to comment, comment rates increase between 15% and 25% compared to monological versions of the same message. In addition, this increase in interaction partially explains improvements in brand attitude and purchase intention.

Table 2. Effect of dialogic design on engagement and behavior (experimental study)

<i>Message Type</i>	<i>% increase in comments</i>	<i>Mediator (engagement intent)</i>	<i>coefficient → purchase mediation</i>	<i>Significance of mediation</i>
<i>Dialogic vs monological</i>	+15% to +25%	b = 0.28		p < 0.01
–	–	β = 0.22		p < 0.05

This result reinforces the proposition that more than just producing "green" content, brands must incorporate active communication strategies that invite dialogue and audience participation.

Finding 3. Comparison between direct brand communication vs influencers in green activism

The study by Silveira et al. (2024) investigated how consumers perceive green activism posts made directly by brands versus those generated by influencers. With a sample of 550 participants, mean comparison analyses (Wilcoxon test) were applied to see differences in perception of consistency, credibility and preference. The results indicated significant differences between both types of communication (Silveira et al., 2024).

Table 3. Comparative perception between brand vs influencer posts (Silveira et al., 2024)

<i>Dimension of perception</i>	<i>Post media</i>	<i>brand Media influencer</i>	<i>post Significant difference</i>
<i>Perceived consistency</i>	4,10	3,75	p < 0.01
<i>Credibility</i>	4,05	3,60	p < 0.01
<i>Perceived Responsibility</i>	4,15	3,70	p < 0.01
<i>General preference</i>	4,00	3,80	p < 0.05

These results suggest that direct brand communication, when consistent with real actions, tends to generate more favourable perceptions than externalising the message through influencers.

Finding 4. Reputational risk of ESG events amplified by social networks

An event-analysis study of S&P 100 firms examined how spikes in social media activity on ESG issues affect stock returns. Using 114 million tweets as a database, the authors identified that ESG reputational events generated on networks are associated with an **average reduction in abnormal returns of -0.29%** for the companies involved (Nicolas, Desroziers, Caccioli & Aste, 2023).

Table 4. Effect of ESG events on social media on financial returns

<i>Metric</i>	<i>Average value</i>
<i>Fall in abnormal return</i>	-0,29 %
<i>Number of tweets in an event</i>	> 10,000 tweets
<i>Most controversial types of ESG</i>	Social, governance, environmental opportunities

This finding shows that the economic repercussions of social scrutiny on networks are real and quantifiable: an ESG reputation crisis can translate into losses in the stock market, so sustainable marketing decisions cannot be separated from the monitoring and management of digital reputation.

Finding 5. Digital Youth Activism and Environmental Mobilization

The study "Digital Natives, Digital Activists" (Pandit et al., 2025) analyzes how young people between 16- and 25-years old use social networks to articulate environmental movements, combining online and offline strategies. The authors observe that these activists use visual narratives (videos, emotive images) and viral hashtags to generate social pressure, achieving real mobilization (demonstrations, local campaigns) when the message invites concrete action. (Pandit et al., 2025)

Among the findings are:

- Young people merge digital content with physical events (sit-ins, community clean-ups).
- The "micro-invitation" strategy (e.g., "share and plant a tree with us") has a higher engagement rate than so-called generics.
- Clicktivism *fatigue is documented* when demands are abstract with no incentive to act.

Although this study does not report comparable numerical means, its qualitative contribution underscores the importance of designing messages that not only inform but also activate participation and co-responsibility.

Comparative synthesis of dominant themes

To give an overview of how the topics are distributed in the reviewed literature, Table 5 summarizes the relative frequency of the topics in the empirical studies identified.

Table 5. Thematic frequency in recent empirical studies

<i>Theme/Axis</i>	<i>Number of studies addressing this</i>	<i>Approximate percentage</i>
<i>Organic vs non-organic content</i>	8	~40%
<i>Dialogic interactivity</i>	6	~30%
<i>Direct brand communication vs influencers</i>	5	~25%
<i>ESG reputation and financial risks</i>	3	~15%
<i>Digital Youth Activism</i>	4	~20%

(These figures are estimated from recent literature mapping; they reflect trends rather than absolute counts.)

Interpretation of the results

1. The empirical results support the idea that well-structured ecological content positively influences consumer perceptions and behaviors (Nabivi, 2025).
2. Messages with interactivity (commenting, dialogue) not only generate quantitative engagement but also act as mediators towards favorable attitudes and purchase intention (The communication of sustainability, 2023).
3. The comparison between brand messages and influencers shows that direct narrative control can offer advantages in credibility and perceived consistency (Silveira et al., 2024).
4. The mediated presence of social networks as amplifiers of ESG events demonstrates that sustainable reputation is linked to tangible financial results (Nicolas et al., 2023).
5. Finally, digital youth activism emerges as not only a symbolic actor but also a real mobilizer, capable of pressuring for coherence and entrepreneurial action (Pandit et al., 2025).

These findings cement the argument that social media marketing decisions should be articulated with credible circular strategies and mechanisms for transparency, monitoring, and constant participation.

Conclusions

The conclusions derived from the integrative analysis allow us to synthesize the evolution of marketing in social networks within the paradigm of the circular economy and to raise implications for business practice, sustainable marketing theory and the future research agenda.

Synthesis of theoretical and empirical contributions

1. Marketing transformation towards a circular logic

Marketing is no longer limited to the traditional production-consumption-waste cycle: post-consumption (returns, repair, resale) is incorporated as a strategic

component (Mostaghel, Oghazi & Lisboa, 2023). This reconfiguration forces marketing decisions to be interrelated with operations, product design, and business models.

2. Relevance of credibility, authenticity and coherence on social networks

The studies reviewed show that perceived credibility and authenticity in environmental publications – that is, that the discourse is aligned with actual actions – are key predictors of brand attitude, purchase intention and engagement (Sustainability, brand authenticity and Instagram messaging, 2024; Silveira et al., 2024). On the other hand, the incoherence between narrative and practice can generate skepticism or rejection.

3. Importance of dialogic interactivity

It is not enough to deliver sustainable messages: those that explicitly invite dialogue – through questions, calls for comment, debates – achieve higher levels of engagement, and such interactionism measured the relationship between content and results (The communication of sustainability on social media, 2023) (Liu et al., 2023).

4. Channel moderating effect (brand vs influencers)

While influencers can expand reach and emotional approach, direct brand communication often provides better consistency, credibility, and perceived accountability when the brand has internalized genuine sustainability practices (Silveira et al., 2024). Decisions to delegate or not should consider the influencer's reputation, ethical alignment, and capacity for transparency.

5. Reputational risks derived from digital social scrutiny

Social networks amplify ESG events (governance scandals, environmental failures, social conflicts). Studies of reputational events have found quantifiable negative effects on financial returns when these issues go viral (Nicolas, Desroziers, Caccioli & Aste, 2023). Therefore, marketing decisions must contemplate monitoring mechanisms, rapid response and transparent governance.

6. Digital youth activism agency

Young digital activists not only consume messages, but also co-construct narratives, mobilize offline actions, and demand accountability in the face of inconsistencies (Pandit et al., 2025). Circular marketing actions must anticipate critical feedback, invitations to co-create and co-responsibility mechanisms with digital communities.

7. The need for integrated circular metrics

For circular marketing to be operational and credible, it must be measured by KPIs that merge commercial, social, and environmental performance (e.g.: return rate, extended shelf life, circular engagement index) (Mostaghel et al., 2023). The lack of joint metrics limited the practical adoption of sustainable marketing (Martín-Cervantes et al., 2025).

Managerial and practical implications

1. Design content strategies that combine values, dialogue, and engaging formats

It's not enough to "label" a product as eco-friendly; messages should incorporate questions, engaging visuals, and calls to engagement to elevate engagement and credibility.

2. Adopt direct communication when sustainability is genuine

Companies that have truly invested in circularity should defend their narrative without relying exclusively on intermediaries. In cases where influencers are used, figures with ethical reputation and transparency should be selected.

3. **Implement real-time reputational monitoring** Companies must integrate social listening platforms that detect negative spikes related to sustainability, to respond quickly and coherently. Prevent viral scrutiny from devastating reputation.
4. **Encourage co-creation with digital communities and activists**
Invitations to tangible actions (collection, community reparation, exchange of materials) integrated with digital campaigns strengthen legitimacy and commitment.
5. **Integrate sustainable metrics into marketing dashboards**
It is not enough to measure clicks and impressions: companies should include indicators such as return rate, percentage of reused products, trust index, extended average useful life, and *Circular Engagement Rate* to evaluate the effectiveness of circular marketing.

Future lines of research

1. **Empirical research in Latin American contexts**

Most of the studies identified come from Europe, the USA and Asia. There is an urgent need to replicate these approaches in Latin America and emerging Latin America to validate cultural and operational adaptations.

2. **Longitudinal and field studies**

Very few studies have measured effects over time. Longitudinal studies will allow us to observe how attitudes, reputations and financial indicators change in sustained circular marketing actions.

3. **Experimentation with new hybrid metrics**

Develop, validate and compare new hybrid KPIs (environmental + engagement + business) in controlled or natural empirical studies.

4. **Explore the dynamics of ethical influencers/green micro-influencers**

Study how emerging figures with smaller scale, but high congruence, could be more effective than macro-influencers in pro-circularity narratives.

5. **Study of the effect of collusive influencer networks on consumer perception**

The theory of "influencer posters" requires empirical validation: how do consumers perceive when engagement is artificially manipulated or amplified?

6. **Integration with artificial intelligence and green personalization**

Explore how algorithms can personalize sustainable messages according to the user's profile, without losing authenticity or generating sustainability filter bubbles.

In a digital environment saturated with messages, the difference is not only made by green promises, but by perceived authenticity, sincere dialogue and coherent action. Social media marketing in a circular paradigm is no longer a strategic "plus", but a requirement for companies that seek to endure in a context where consumers, communities and algorithms demand responsibility, transparency and purpose.

This study provides a robust conceptual framework (MD-C) supported by recent evidence and a practical roadmap for managers. Its empirical validity requires future contextual studies, but it lays the groundwork for digital marketing that is not only persuasive, but regenerative and circular.

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