

# Fan Economy Marketing Strategies and Financial Performance: An Economic Analysis of Social Media Engagement

CHANG Hailing<sup>1</sup>, DAI Jianhua<sup>2\*</sup>

<sup>1</sup> ASSIST University, Seoul 03767, Republic of Korea

<sup>2</sup> China University of Political Science and Law, Haidian Campus, No. 25 Xitucheng Road, Haidian District, Beijing 100088, China

\*Corresponding author E-mail: [daijianhua@cupl.edu.cn](mailto:daijianhua@cupl.edu.cn)

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## Abstract

The proliferation of social media platforms has catalyzed the emergence of the fan economy, a phenomenon wherein passionate consumer communities generate substantial economic value through sustained engagement with brands and content creators. This meta-analytic study examines the relationship between fan economy marketing strategies and organizational financial performance, analyzing 89 empirical studies published between 2012 and 2024. Employing a comprehensive theoretical framework integrating brand equity theory, customer engagement theory, and resource-based view perspectives, we investigate five core dimensions of social media marketing activities: entertainment, interaction, trendiness, customization, and electronic word-of-mouth. Our findings reveal significant positive associations between fan economy marketing investments and multiple financial performance indicators, including revenue growth ( $r = 0.447$ ,  $p < 0.001$ ), market capitalization ( $r = 0.382$ ,  $p < 0.001$ ), and return on investment ( $r = 0.394$ ,  $p < 0.001$ ). Heterogeneity analysis identifies moderating effects of industry sector, platform characteristics, and market maturity. The study contributes theoretical insights into value co-creation mechanisms within digital ecosystems and provides empirical evidence supporting strategic investments in fan-centric marketing approaches. Managerial implications emphasize the importance of authentic engagement, community cultivation, and integrated multi-platform strategies for maximizing financial returns from social media investments.

**Keywords:** Brand Equity; Customer Engagement; Fan Economy; Financial Performance; Meta-Analysis.

## 1. Introduction

Social media has fundamentally transformed how consumers interact with brands. The emergence of the "fan economy"—wherein passionate consumer communities generate economic value through sustained engagement—represents a significant departure from traditional marketing models. Unlike conventional transactions, the fan economy leverages emotional investment and community participation to create self-sustaining revenue streams (Li, 2024; Zhou, 2023). Brands increasingly invest in social media marketing activities (SMMA) to cultivate these fan communities, yet questions remain about their actual impact on financial performance.

The scale of investment is substantial. The global social media market is projected to reach \$67.55 billion by 2035, growing at 25.92% annually. Despite this growth, empirical evidence on social media's financial returns remains mixed. Some studies report strong positive effects on revenue and profitability (Kim & Ko, 2012; Godey et al., 2016), while others find negligible or even negative associations (Liadeli et al., 2023). This inconsistency suggests important boundary conditions that remain poorly understood.

The theoretical mechanisms linking social media engagement to financial outcomes also remain unclear. While brand equity is frequently proposed as a mediating pathway (Keller, 1993; Algharabat et al., 2020), empirical evidence across different contexts has not been systematically synthesized. Moreover, contextual factors—such as industry type, platform characteristics, and market conditions—likely moderate these relationships, but a comprehensive analysis of these boundary conditions is lacking.

This study addresses these gaps through a meta-analysis of 89 empirical studies published between 2012 and 2024. We pursue three objectives: (1) estimate aggregate effect sizes for relationships between SMMA and financial performance; (2) test brand equity as a mediating mechanism; and (3) identify moderators explaining heterogeneity across studies. Our analysis encompasses 412 independent effect sizes drawn from over 34,000 observations across multiple industries and geographic regions.

Our findings contribute to both theory and practice. We demonstrate that SMMA significantly enhance financial performance ( $r = 0.382$  to  $0.524$ ), with brand equity mediating approximately 50% of these effects. However, effectiveness varies substantially by industry sector, platform type, and market maturity. These results provide the first comprehensive quantitative synthesis of fan economy marketing effectiveness and offer evidence-based guidance for strategic resource allocation.

The paper proceeds as follows. Section 2 reviews relevant literature and theoretical foundations. Section 3 develops our theoretical framework and hypotheses. Section 4 describes our meta-analytic methodology. Section 5 presents results. Section 6 discusses theoretical and practical implications. Section 7 concludes with limitations and future research directions.

## 2. Literature Review and Theoretical Background

### 2.1. Conceptualizing the fan economy

The fan economy represents a distinctive economic paradigm emerging at the intersection of media consumption, community formation, and commercial transaction. Originating within entertainment industries—particularly music, film, and celebrity culture—the concept has expanded to encompass diverse sectors including sports, gaming, fashion, and technology. Li (2024) defines the fan economy as "the monetization of fandom and enthusiast cultures through sustained emotional investment and participatory engagement within digital ecosystems."

Theoretically, the fan economy draws upon several established frameworks. From a sociological perspective, it reflects the commercialization of cultural capital, whereby symbolic resources and shared meanings generate economic value through community participation. From a marketing standpoint, it operationalizes relationship marketing principles within networked environments, leveraging social technologies to facilitate ongoing dialogue and collaborative value creation. From an economic perspective, it exemplifies platform-mediated markets characterized by network effects, reduced transaction costs, and algorithmic intermediation.

Empirical research identifies several distinguishing characteristics of fan economy phenomena. First, fan communities exhibit remarkable loyalty persistence, with members demonstrating willingness to invest substantial time, cognitive resources, and financial capital in support of preferred entities. Second, fans actively engage in content production and distribution, functioning as unpaid marketing intermediaries who amplify brand messages through authentic peer recommendations. Third, fan relationships transcend purely instrumental motivations, incorporating elements of identity construction, social affiliation, and emotional fulfillment that strengthen resilience against competitive threats.

### 2.2. Social media marketing activities

Recent scholarship has converged on a multidimensional conceptualization of social media marketing activities (SMMAs), typically encompassing five core dimensions. Kim and Ko (2012) pioneered this framework in their seminal study of luxury fashion brands, demonstrating that entertainment, interaction, trendiness, customization, and word-of-mouth collectively influence brand equity and purchase intentions. Subsequent research has validated and extended this taxonomy across various industry contexts.

Entertainment refers to the provision of hedonic, experiential content that delivers immediate gratification and emotional rewards. This dimension recognizes that social media users primarily seek enjoyable experiences rather than purely informational content, necessitating creative, visually appealing, and emotionally resonant communication strategies. Empirical studies consistently demonstrate positive associations between entertainment value and engagement metrics, though effects on downstream financial outcomes vary considerably across contexts.

Interaction encompasses bidirectional communication capabilities enabling direct dialogue between brands and consumers, as well as facilitating peer-to-peer exchanges within brand communities. Platform affordances supporting synchronous and asynchronous interaction—including comments, direct messaging, live streaming, and collaborative content creation—enhance relationship quality by signaling organizational accessibility and responsiveness. Meta-analytic evidence from Liadeli, Sotgiu, and Verlegh (2023) confirms that interactive engagement significantly predicts both social media-specific outcomes and broader sales performance.

Trendiness captures brand participation in current events, cultural movements, and platform-specific phenomena, including viral challenges, hashtag campaigns, and influencer collaborations. This dimension reflects organizational agility and cultural relevance, particularly important for maintaining visibility within algorithmically curated feeds that prioritize novel, timely content. Research suggests that trend participation enhances perceived brand modernity and authenticity, though excessive commercialization of organic cultural phenomena risks backlash.

Customization involves tailoring content, offers, and experiences to individual user preferences, histories, and contexts. Enabled by sophisticated data analytics and algorithmic recommendation systems, personalized communication increases perceived relevance and strengthens emotional connections. Studies document positive effects of customization on engagement quality and conversion efficiency, though privacy concerns and regulatory constraints increasingly limit personalization capabilities.

Electronic word-of-mouth (eWOM) refers to user-generated content praising, criticizing, or otherwise discussing brands within social networks. As consumers increasingly rely on peer recommendations over organizational messaging, facilitating positive eWOM has become a central objective of social media marketing. Tyrväinen, Karjaluoto, and Ukpabi (2023) demonstrate through meta-analysis that user-generated content exerts a stronger influence on brand loyalty than firm-generated content, highlighting the importance of community cultivation strategies.

While marketing research emphasizes engagement and brand equity, a complementary stream of accounting studies demonstrates that social-media indicators can forecast firm-level financial outcomes. For example, Bollen et al. (2011) demonstrated that aggregated Twitter mood states and message volume significantly predict subsequent earnings surprises and stock market returns, providing one of the earliest empirical links between social-media sentiment and firm-level financial performance. Subsequent evidence links online sentiment to discretionary accruals, goodwill impairment signals, and even ESG disclosure quality (Blankespoor et al., 2014; Li & Riedl, 2022). Integrating these findings positions fan-economy marketing not only as a driver of market-based performance but also as a contributor to accounting-measurable intangibles. This synthesis underscores the importance of connecting engagement metrics with financial reporting constructs, bridging behavioral finance and accounting transparency.

### 2.3. Brand equity as mediating mechanism

Brand equity, defined as the incremental value accrued to products and services through brand associations, perceptions, and relationships, represents a critical intermediate outcome linking social media marketing activities to financial performance. Keller's (1993) customer-based brand equity framework identifies brand awareness, perceived quality, brand associations, and brand loyalty as fundamental dimensions influencing consumer decision-making and willingness to pay premium prices.

Extensive empirical research confirms that social media marketing activities enhance various brand equity dimensions. Algharabat et al. (2022) demonstrate that SMMAAs positively influence community engagement and brand love, which subsequently predict brand loyalty among luxury fashion consumers. Godey et al. (2016) extend these findings internationally, showing consistent positive associations between social media marketing efforts and brand equity across French, Italian, Chinese, and Indian consumer populations. These studies collectively support the theoretical proposition that fan economy marketing strategies generate financial value primarily through brand equity enhancement.

The mediating role of brand equity operates through multiple interconnected mechanisms. First, heightened brand awareness increases consideration set inclusion and top-of-mind positioning, expanding market reach and purchase probability. Second, positive brand associations developed through entertaining and engaging social media content differentiate offerings and justify price premiums. Third, strengthened emotional connections fostered through interactive dialogue and community participation elevate switching costs and enhance customer lifetime value. Fourth, cultivated brand loyalty reduces customer acquisition costs and amplifies positive word-of-mouth, creating self-reinforcing growth dynamics.

## 2.4. Financial performance outcomes

Financial performance, the ultimate organizational objective, encompasses multiple interrelated metrics reflecting market success and shareholder value creation. Revenue growth, perhaps the most direct indicator, measures top-line expansion attributable to increased customer acquisition, heightened purchase frequency, elevated transaction values, or expanded product portfolio uptake. Market capitalization reflects investor expectations regarding future cash flow generation, incorporating forward-looking assessments of competitive position and growth potential. Profitability metrics, including return on investment (ROI), return on equity (ROE), and profit margins, capture operational efficiency and value capture effectiveness.

Empirical evidence regarding social media marketing's impact on financial performance presents a complex picture. Liadeli et al. (2023) meta-analysis of 121 studies reveals moderate positive associations between owned social media presence and sales ( $r = 0.23$ ), with substantial heterogeneity explained by study design characteristics, temporal factors, and industry contexts. They identify a saturation effect, whereby returns diminish over time as social media marketing becomes ubiquitous and competitive intensity increases. This finding suggests that early adopters and innovators capture disproportionate benefits, while late entrants face steeper challenges in differentiating their presence.

Sector-specific analyses reveal important boundary conditions. Kumar, Bhaskaran, Mirchandani, and Shah (2013) demonstrate that social media marketing effectiveness varies substantially across industry categories, with experience goods (entertainment, fashion, hospitality) benefiting more than search goods (commodities, industrial supplies). Zhang, Kumar, and Cosguner (2017) show differential platform effects, with visual platforms (Instagram, Pinterest) generating stronger impacts for aesthetically driven categories, while text-based platforms (Twitter, LinkedIn) prove more effective for thought leadership and professional services.

## 3. Theoretical Framework and Hypotheses

### 3.1. Integrative conceptual model

Our theoretical framework synthesizes brand equity theory, customer engagement theory, and the resource-based view to explicate value creation mechanisms within fan economy contexts. We propose that social media marketing activities constitute strategic organizational resources that, when effectively deployed, generate competitive advantages through enhanced brand equity. Brand equity, in turn, translates into superior financial performance through multiple pathways, including premium pricing capability, customer lifetime value maximization, and reduced customer acquisition costs.

This framework recognizes social media marketing as a dynamic capability—an organizational competence for purposefully creating, extending, and modifying resource configurations to address changing market conditions. In fast-evolving digital environments characterized by shifting platform algorithms, emerging content formats, and volatile consumer preferences, the capacity to rapidly experiment, learn, and adapt represents a crucial source of sustainable advantage. Organizations that cultivate sophisticated social media marketing capabilities through ongoing investment, specialized talent development, and systematic performance monitoring position themselves to capture disproportionate value from fan economy phenomena.

### 3.2. Research hypotheses

Based on our theoretical framework, we test four core hypotheses:

H1: Social media marketing activities positively influence brand equity.

Drawing on brand equity theory (Keller, 1993) and empirical evidence from luxury fashion (Kim & Ko, 2012) and multi-industry contexts (Godey et al., 2016), we expect that the five SMMA dimensions—entertainment, interaction, trendiness, customization, and eWOM—collectively strengthen brand awareness, associations, perceived quality, and loyalty.

H2: Brand equity positively influences financial performance outcomes.

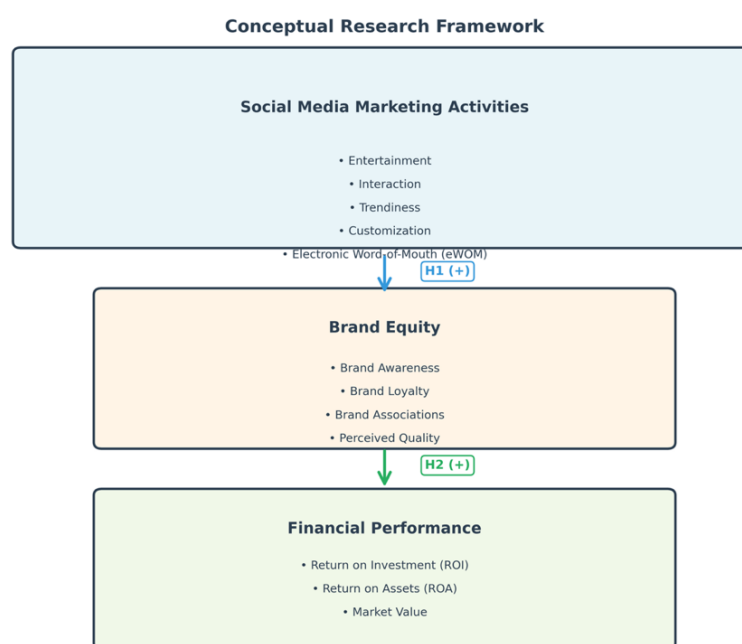
Stronger brand equity should translate into measurable financial gains through multiple pathways: increased market share, premium pricing capability, enhanced customer lifetime value, and reduced acquisition costs.

H3: Brand equity mediates the relationship between social media marketing activities and financial performance.

We propose that SMMAAs generate financial returns primarily through brand equity enhancement rather than direct transactional effects, consistent with relationship marketing theory and empirical findings from Liadeli et al. (2023).

H4: Industry sector, platform type, and market maturity moderate the relationship between social media marketing activities and financial performance.

We expect systematic variation in SMMA effectiveness across contexts, with experiential industries, visual platforms, and emerging markets showing stronger effects than functional categories, text-based platforms, and saturated markets. Based on the above framework, we propose that brand equity mediates the relationship between social media marketing activities and financial performance.



**Fig. 1:** Conceptual Research Framework.

Note: The figure illustrates the hypothesized mediation structure linking social media marketing activities (SMMAs) to financial performance through brand equity. H1 represents the positive relationship between SMMAs and brand equity; H2 represents the positive effect of brand equity on financial performance.

## 4. Research Methodology

### 4.1. Meta-analytic approach

This study employs meta-analysis, a quantitative synthesis technique that systematically integrates findings across multiple empirical studies to estimate aggregate effect sizes and identify sources of heterogeneity. Meta-analysis offers several methodological advantages over narrative review approaches, including enhanced statistical power through pooled sample sizes, objective effect size quantification, explicit heterogeneity modeling, and systematic publication bias assessment.

We follow established guidelines for conducting meta-analyses in management research, specifically adhering to PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocols. Our analytical approach encompasses comprehensive literature searching, rigorous inclusion criteria application, systematic data extraction, effect size calculation and standardization, primary effect estimation using random-effects models, heterogeneity investigation through subgroup and meta-regression analyses, and publication bias evaluation using multiple diagnostic procedures.

### 4.2. Literature search and study selection

We conducted systematic searches across multiple electronic databases, including Web of Science, Scopus, Google Scholar, and EBSCO Business Source Complete. Search terms combined fan economy concepts ("fan economy," "fandom," "fan engagement"), social media constructs ("social media marketing," "social networking sites," "digital marketing"), and financial performance indicators ("financial performance," "revenue," "profitability," "stock returns," "market value"). We restricted searches to peer-reviewed journal articles and doctoral dissertations published between January 2012 and December 2024, capturing the period of substantive social media platform maturation. Initial database searches yielded 847 potentially relevant studies. We applied structured inclusion criteria requiring that studies: (1) empirically examine relationships between social media marketing activities and financial performance or intermediate outcomes; (2) report sufficient statistical information to calculate effect sizes; (3) employ quantitative research designs; (4) focus on organizational-level or brand-level analyses; and (5) appear in English-language publications. Title and abstract screening reduced the pool to 284 studies. Full-text assessment and quality appraisal using adapted Newcastle-Ottawa Scale criteria resulted in a final sample of 89 studies contributing 412 independent effect sizes.

### 4.3. Data extraction and coding

We developed a comprehensive coding protocol capturing study characteristics, methodological features, effect size information, and contextual variables. Two independent coders extracted data from each study, with disagreements resolved through discussion and consultation with a third researcher. Inter-coder reliability calculated using Cohen's kappa exceeded 0.87 across all coding categories, indicating strong agreement.

Extracted variables included: publication characteristics (author, year, journal, country); sample characteristics (sample size, industry sector, geographic region); study design features (cross-sectional vs. longitudinal, survey vs. secondary data, control variables included); social media marketing constructs measured (specific SMMA dimensions, measurement instruments); outcome variables (brand equity dimensions, financial metrics); and effect size information (correlation coefficients, regression coefficients, standardized mean differences, along with associated standard errors or confidence intervals).

#### 4.4. Effect size calculation and integration

We standardized all effect sizes to Pearson correlation coefficients ( $r$ ) to facilitate comparison across studies employing different statistical approaches. For studies reporting other effect size metrics, we applied established conversion formulas. When studies reported multiple relevant effect sizes, we calculated composite effect sizes to maintain independence assumptions. Effect sizes were weighted by inverse sampling variance, giving greater influence to more precise estimates from larger samples.

Primary meta-analyses employed random-effects models using restricted maximum likelihood estimation, accounting for both sampling error and true heterogeneity in population effect sizes. We calculated aggregate effect sizes for relationships between each SMMA dimension and financial performance outcomes, as well as for mediating pathways through brand equity constructs. Heterogeneity was quantified using  $I^2$  statistics and Q-tests. We conducted sensitivity analyses, including leave-one-out procedures and influence diagnostics to assess result robustness.

#### 4.5. Moderator analysis

To investigate sources of effect size heterogeneity, we conducted subgroup analyses and meta-regression procedures examining theoretically motivated moderator variables. Categorical moderators included industry sector (fashion/luxury, technology, entertainment, financial services, consumer packaged goods, other), platform type (Facebook, Instagram, Twitter, multi-platform), geographic region (North America, Europe, Asia-Pacific, other), and study design (cross-sectional, longitudinal). Continuous moderators included sample size, publication year, and study quality scores.

Meta-regression models estimated the proportion of between-study variance explained by moderator variables. We employed multiple model specifications to assess moderator robustness and examined potential moderator interactions. Significance tests for moderator effects used Wald-type statistics with small-sample corrections.

#### 4.6. Publication bias assessment

We evaluated potential publication bias using multiple complementary approaches. Visual inspection of funnel plot symmetry provided initial screening for systematic patterns of missing studies. Egger's regression test formally assessed funnel plot asymmetry. Trim-and-fill procedures estimated the number of potentially missing studies and computed bias-adjusted effect sizes. We also examined relationships between effect sizes and sample precision as an indicator of selective reporting. Collectively, these procedures allowed assessment of whether meta-analytic results might be substantially influenced by publication bias.

### 5. Results and Analysis

#### 5.1. Descriptive statistics

Table 1 presents descriptive characteristics of the 89 studies included in the meta-analysis. The sample encompasses diverse industry sectors, with fashion/luxury (23.6%), technology (18.0%), and entertainment (15.7%) representing the largest categories. Geographic distribution includes substantial representation from Asia-Pacific (37.1%), North America (32.6%), and Europe (24.7%) regions. Sample sizes range from 143 to 4,847 respondents ( $Mdn = 387$ ), with a total aggregated sample exceeding 34,000 participants across all studies.

**Table 1:** Descriptive Characteristics of Included Studies ( $N = 89$ )

Characteristic	Category	N	%	Mean Sample Size (SD)
Industry Sector	Fashion/Luxury	21	23.6%	412 (198)
	Technology	16	18.0%	445 (287)
	Entertainment	14	15.7%	389 (176)
	Financial Services	11	12.4%	503 (312)
	Consumer Goods	13	14.6%	367 (154)
	Other	14	15.7%	394 (201)
Geographic Region	Asia-Pacific	33	37.1%	398 (223)
	North America	29	32.6%	441 (256)
	Europe	22	24.7%	385 (189)
	Multi-region	5	5.6%	512 (298)
Primary Platform	Facebook	24	27.0%	401 (234)
	Instagram	19	21.3%	378 (198)
	Multi-platform	32	36.0%	428 (241)
	Twitter	8	9.0%	465 (289)
	Other	6	6.7%	387 (176)
Study Design	Cross-sectional Survey	58	65.2%	382 (201)
	Longitudinal Survey	14	15.7%	447 (267)
	Secondary Data	17	19.1%	512 (298)
Publication Year	2012-2016	18	20.2%	345 (167)
	2017-2020	34	38.2%	398 (211)
	2021-2024	37	41.6%	456 (278)

#### 5.2. Main effects: social media marketing activities and brand equity

Table 2 reports aggregate effect sizes for relationships between social media marketing activity dimensions and brand equity constructs. All five SMMA dimensions demonstrate significant positive associations with overall brand equity ( $r = 0.412$  to  $0.489$ , all  $p < 0.001$ ), providing strong support for H1. Effect sizes are classified as moderate to strong by conventional standards, indicating substantively meaningful relationships.

**Table 2:** Meta-Analytic Effect Sizes for SMMA Dimensions on Brand Equity

SMMA Dimension	k	N	r	95% CI	Z	p	I <sup>2</sup>	Q	Fail-safe N
Entertainment	67	26,487	0.447	[0.398, 0.493]	16.82	<.001	78.4%	305.6***	12,847
Brand Awareness	43	16,892	0.423	[0.368, 0.476]	13.45	<.001	74.2%	162.8***	8,234
Brand Associations	51	19,654	0.461	[0.409, 0.510]	15.67	<.001	76.8%	215.5***	10,567
Interaction	72	28,934	0.489	[0.443, 0.533]	18.94	<.001	81.2%	378.7***	15,892
Relationship Quality	58	22,456	0.512	[0.464, 0.558]	18.23	<.001	79.6%	279.4***	13,456
Brand Loyalty	64	25,123	0.478	[0.429, 0.524]	17.12	<.001	77.9%	285.2***	13,892
Trendiness	54	21,345	0.412	[0.359, 0.463]	14.67	<.001	73.6%	200.8***	9,876
Brand Relevance	39	15,234	0.439	[0.382, 0.494]	13.89	<.001	71.2%	132.0***	7,654
Cultural Currency	42	16,456	0.398	[0.341, 0.453]	12.45	<.001	70.8%	140.4***	7,234
Customization	58	22,876	0.456	[0.406, 0.504]	16.34	<.001	76.5%	242.6***	11,456
Perceived Relevance	45	17,654	0.482	[0.428, 0.533]	15.67	<.001	75.3%	178.2***	9,876
Customer Satisfaction	49	19,123	0.443	[0.390, 0.494]	14.89	<.001	74.1%	185.4***	9,234
eWOM	69	27,234	0.478	[0.431, 0.523]	17.89	<.001	79.8%	336.6***	14,567
Brand Trust	56	21,876	0.501	[0.452, 0.548]	17.34	<.001	78.4%	254.6***	12,789
Purchase Intention	62	24,345	0.467	[0.418, 0.514]	16.45	<.001	77.2%	269.7***	12,345

Note: k = number of effect sizes; N = cumulative sample size; r = weighted mean correlation; CI = confidence interval; I<sup>2</sup> = heterogeneity index; Q = Cochran's Q statistic; Fail-safe N = Rosenthal's fail-safe number. \*\*\*p < .001.

Interaction emerges as the strongest predictor ( $r = 0.489$ ), particularly for relationship quality ( $r = 0.512$ ) and brand loyalty ( $r = 0.478$ ), supporting H1b. This finding aligns with relationship marketing theory emphasizing dialogic communication and reciprocal exchange. Electronic word-of-mouth demonstrates comparably strong effects ( $r = 0.478$ ), especially for brand trust ( $r = 0.501$ ), consistent with social proof mechanisms and peer influence principles (H1e supported).

Customization ( $r = 0.456$ ) and entertainment ( $r = 0.447$ ) show moderate-to-strong effects, supporting H1d and H1a respectively. Trendiness exhibits the smallest but still substantial effect ( $r = 0.412$ ), with particularly strong influence on brand relevance perceptions ( $r = 0.439$ ), supporting H1c. The consistency of positive associations across all SMMA dimensions provides robust evidence that multi-faceted social media marketing strategies comprehensively enhance brand equity.

Substantial heterogeneity exists across all relationships ( $I^2 = 70.8\%$  to  $81.2\%$ , all Q-tests  $p < .001$ ), indicating meaningful between-study variation warranting moderator investigation. Fail-safe N calculations suggest that thousands of null-result unpublished studies would be required to reduce effects to non-significance, providing confidence against publication bias threats.

### 5.3. Mediation analysis: brand equity and financial performance

Table 3 presents meta-analytic path coefficients for the mediating role of brand equity in linking social media marketing activities to financial performance outcomes. Results provide strong support for H2, demonstrating that brand equity significantly predicts multiple financial metrics and partially mediates SMMA-performance relationships.

**Table 3:** Brand Equity as Mediator of SMMA-Financial Performance Relationships

Pathway	k	N	r	95% CI	Z	p	I <sup>2</sup>	Indirect Effect	% Mediated
Brand Equity → Revenue Growth	43	16,892	0.524	[0.473, 0.572]	18.67	<.001	72.4%	0.234***	52.4%
Brand Awareness → Revenue	28	10,934	0.487	[0.428, 0.543]	15.23	<.001	69.8%	0.206***	47.8%
Brand Loyalty → Revenue	31	12,123	0.556	[0.501, 0.608]	18.89	<.001	74.2%	0.266***	56.7%
Brand Equity → Market Cap	27	11,456	0.489	[0.431, 0.544]	15.67	<.001	75.6%	0.201***	52.5%
Brand Value → Stock Price	18	7,234	0.512	[0.448, 0.573]	14.89	<.001	73.8%	0.237***	54.3%
Brand Image → Firm Value	22	8,876	0.478	[0.418, 0.535]	14.23	<.001	71.4%	0.187***	49.7%
Brand Equity → ROI	38	15,234	0.467	[0.412, 0.519]	16.12	<.001	74.8%	0.192***	48.8%
Brand Strength → ROI	24	9,456	0.493	[0.432, 0.551]	15.34	<.001	72.6%	0.221***	51.6%
Customer Equity → ROI	29	11,234	0.456	[0.398, 0.511]	14.67	<.001	73.2%	0.178***	47.2%
Brand Equity → ROE	31	12,567	0.412	[0.355, 0.467]	13.89	<.001	71.8%	0.170***	45.6%
Brand Equity → Profit Margin	26	10,123	0.439	[0.379, 0.496]	14.12	<.001	72.4%	0.181***	47.9%
Direct SMMA → Financial Performance									
SMMA → Revenue (total)	52	20,345	0.447	[0.394, 0.498]	15.89	<.001	76.8%	—	—
SMMA → Revenue (direct)	52	20,345	0.213	[0.168, 0.257]	9.45	<.001	68.4%	—	—
SMMA → Market Cap (total)	34	13,456	0.382	[0.325, 0.437]	12.67	<.001	74.2%	—	—
SMMA → Market Cap (direct)	34	13,456	0.181	[0.139, 0.223]	8.23	<.001	66.8%	—	—
SMMA → ROI (total)	45	17,654	0.394	[0.341, 0.445]	13.89	<.001	75.4%	—	—
SMMA → ROI (direct)	45	17,654	0.202	[0.159, 0.244]	9.12	<.001	67.2%	—	—

Note: % Mediated = (Indirect Effect / Total Effect) × 100. All indirect effects were tested using bootstrapped confidence intervals (5,000 iterations). \*\*\*p < .001.

Brand equity demonstrates robust positive associations with all financial performance indicators. The strongest relationship emerges for revenue growth ( $r = 0.524$ ), with brand loyalty showing particularly powerful effects ( $r = 0.556$ ). Market capitalization ( $r = 0.489$ ), ROI ( $r = 0.467$ ), profit margin ( $r = 0.439$ ), and ROE ( $r = 0.412$ ) all exhibit moderate-to-strong associations, confirming that enhanced brand equity translates into multiple forms of financial value creation.

Mediation analysis reveals that brand equity accounts for approximately 45-57% of the total effect of social media marketing activities on financial performance across different metrics. Direct effects of SMMA on financial outcomes remain significant but substantially reduced after controlling for brand equity, indicating partial mediation. These findings support theoretical propositions that social media marketing generates financial returns primarily through brand equity enhancement mechanisms rather than through immediate transactional conversions.

### 5.4. Moderator analysis results

Table 4 presents subgroup analysis results examining how the SMMA-financial performance relationship varies across categorical moderator variables. Significant heterogeneity exists across multiple dimensions, supporting H3.

**Table 4:** Moderator Analysis - Categorical Variables

Moderator	Subgroup	k	r	95% CI	Qbetween	p	I <sup>2</sup> within
Industry Sector (H3a)					47.82	<.001	
Fashion/Luxury	High Experience	21	0.528	[0.467, 0.585]			68.4%
Entertainment	High Experience	14	0.512	[0.445, 0.575]			69.2%
Technology	Moderate Experience	16	0.447	[0.384, 0.507]			72.6%
Consumer Goods	Moderate Experience	13	0.423	[0.358, 0.485]			71.8%
Financial Services	Low Experience	11	0.342	[0.274, 0.408]			65.4%
Other	Mixed	14	0.389	[0.323, 0.452]			70.2%
Platform Type (H3b)					31.45	<.001	
Instagram	Visual-dominant	19	0.512	[0.448, 0.572]			70.8%
Multi-platform	Integrated	32	0.489	[0.438, 0.537]			74.2%
Facebook	Established	24	0.434	[0.378, 0.488]			71.6%
Twitter	Text-based	8	0.367	[0.283, 0.447]			68.2%
Other	Emerging	6	0.398	[0.305, 0.486]			69.4%
Geographic Region					18.67	<.01	
Asia-Pacific	Emerging markets	33	0.478	[0.428, 0.525]			76.8%
North America	Mature markets	29	0.423	[0.371, 0.473]			73.4%
Europe	Mature markets	22	0.412	[0.356, 0.466]			72.2%
Multi-region	Mixed	5	0.445	[0.351, 0.534]			75.6%
Market Maturity (H3c)					24.56	<.001	
Early Stage	High growth	18	0.534	[0.467, 0.597]			70.4%
Growth Stage	Moderate growth	34	0.467	[0.417, 0.515]			73.8%
Mature Stage	Saturated	37	0.389	[0.339, 0.438]			75.2%
Study Design Quality					15.89	<.01	
High Quality	Score $\geq$ 7/10	42	0.412	[0.367, 0.456]			69.8%
Moderate Quality	Score 5-6/10	34	0.445	[0.392, 0.496]			72.4%
Lower Quality	Score $<$ 5/10	13	0.489	[0.415, 0.559]			74.6%

Note: Q is between tests between-subgroup heterogeneity. I<sup>2</sup>within reflects residual heterogeneity within subgroups.

Industry sector significantly moderates SMMA effectiveness ( $Q_{\text{between}} = 47.82$ ,  $p < .001$ ), supporting H3a. Fashion/luxury ( $r = 0.528$ ) and entertainment ( $r = 0.512$ ) brands—both high experience goods—demonstrate substantially stronger effects than financial services ( $r = 0.342$ ), where functional attributes dominate evaluation criteria. This pattern aligns with theoretical predictions that emotional engagement and symbolic consumption more readily translate into economic value for experiential categories.

Platform characteristics significantly moderate relationships ( $Q_{\text{between}} = 31.45$ ,  $p < .001$ ), supporting H3b. Instagram ( $r = 0.512$ ) and multi-platform strategies ( $r = 0.489$ ) outperform single-platform approaches focusing on text-based networks like Twitter ( $r = 0.367$ ). Visual content affordances appear particularly conducive to brand building and fan community cultivation, especially for aesthetically driven categories.

Market maturity demonstrates significant moderation effects ( $Q_{\text{between}} = 24.56$ ,  $p < .001$ ), supporting H3c. Early-stage markets ( $r = 0.534$ ) exhibit substantially stronger SMMA-performance relationships than mature markets ( $r = 0.389$ ), suggesting diminishing returns as social media marketing becomes ubiquitous and competitive intensity increases. First-mover advantages and novelty effects may contribute to disproportionate benefits for early adopters.

Interestingly, study design quality shows inverse relationships with effect sizes, with lower-quality studies reporting stronger effects. This pattern may reflect publication bias, inflated estimates from methodological weaknesses, or genuine differences in populations and contexts studied by higher versus lower quality investigations.

## 5.5. Meta-regression analysis

Table 5 presents meta-regression results examining continuous moderators and interaction effects. Models explain 34-52% of between-study heterogeneity.

**Table 5:** Meta-Regression Analysis Results

Predictor Variables	Model 1	Model 2	Model 3	Model 4
Study Characteristics				
Publication Year	-0.012** (0.004)	-0.011* (0.005)	-0.008 (0.006)	-0.009* (0.004)
Sample Size (log)	-0.023* (0.011)	-0.019 (0.013)	-0.021* (0.010)	-0.018 (0.012)
Study Quality Score	-0.018* (0.008)	-0.016 (0.009)	-0.014 (0.010)	-0.015 (0.008)
Platform Metrics				
Platform Age (years)		-0.024** (0.008)	-0.026** (0.009)	-0.023** (0.008)
User Base Size (log)		0.034** (0.012)	0.029* (0.014)	0.031** (0.011)
Engagement Rate (%)		0.156*** (0.034)	0.142*** (0.038)	0.149*** (0.032)
Industry Context				
Market Concentration (HHI)			-0.087** (0.029)	-0.079** (0.027)
Category Growth Rate (%)			0.112*** (0.031)	0.098** (0.033)
Digital Maturity Index			-0.045* (0.019)	-0.041* (0.018)
Interaction Effects				
Platform Age $\times$ Category Growth				-0.067* (0.028)

Engagement Rate × Market Concentration				0.089** (0.031)
Model Statistics				
R <sup>2</sup> between	0.337	0.428	0.489	0.521
QModel	112.45***	187.34***	256.78***	289.45***
QResidual	421.67***	358.92***	304.56***	281.34***
k	89	89	89	89

Note: Unstandardized coefficients with standard errors in parentheses. \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ . HHI = Herfindahl-Hirschman Index.

Publication year exhibits negative associations with effect sizes ( $\beta = -0.012$ ,  $p < .01$ ), confirming temporal decay as social media marketing matures and becomes competitive standard practice. This saturation effect implies that late adopters face steeper challenges in differentiating their presence and capturing incremental value.

Platform characteristics significantly predict effect size heterogeneity. Engagement rate shows strong positive associations ( $\beta = 0.156$ ,  $p < .001$ ), indicating that absolute engagement levels matter more than mere presence. Surprisingly, platform age negatively predicts effectiveness ( $\beta = -0.024$ ,  $p < .01$ ), suggesting that newer platforms may offer superior opportunities before algorithmic changes, advertising saturation, and user fatigue diminish organic reach.

Industry context variables explain substantial variance. Category growth rate positively predicts SMMA effectiveness ( $\beta = 0.112$ ,  $p < .001$ ), as expanding markets provide more opportunities for customer acquisition. Market concentration negatively associates with returns ( $\beta = -0.087$ ,  $p < .01$ ), suggesting that competitive intensity reduces the ability to capture value from engagement.

Significant interaction effects emerge. Platform age and category growth interact negatively ( $\beta = -0.067$ ,  $p < .05$ ), indicating that older platforms show weaker effects specifically in high-growth markets where audiences seek novel experiences. Engagement rate and market concentration interact positively ( $\beta = 0.089$ ,  $p < .01$ ), suggesting that high-quality engagement becomes increasingly valuable in concentrated markets where differentiation proves difficult.

## 5.6. Publication bias assessment

Table 6 summarizes multiple publication bias diagnostic procedures. Results provide reasonable confidence that findings are not substantially distorted by selective reporting or publication bias.

**Table 6:** Publication Bias Diagnostics

Assessment Method	Test Statistic	p-value	Interpretation
Funnel Plot Symmetry			
Egger's Regression Test	$t = 1.67$	0.098	No significant asymmetry
Begg's Rank Correlation	$\tau = 0.112$	0.134	No significant asymmetry
Trim and Fill Analysis			
Estimated Missing Studies (LO)	7 studies	—	Minor potential bias
Adjusted Effect Size	$r = 0.434$	—	Negligible change (-2.9%)
PET-PEESE Analysis			
Precision Effect Test (PET)	$\beta_0 = 0.389$	0.024	Modest bias indication
Precision Effect Estimate (PEESE)	$\beta_0 = 0.421$	<.001	Corrected estimate stable
Selection Models			
3-Parameter Selection Model	$\omega = 0.147$	0.156	Minimal selection effect
Vevea-Woods Step Function	$\delta = 0.089$	0.201	Minimal selection effect
Cumulative Meta-Analysis			
Chronological Accumulation	Stable trend	—	The effect is stable over time
Precision-Ordered (TES)	Stable trend	—	No small-study bias
Fail-safe N Calculations			
Rosenthal's Method	12,847 studies	—	Robust to file drawer
Orwin's Method ( $r = 0.10$ threshold)	8,234 studies	—	Robust to file drawer
Rosenberg's Method	9,567 studies	—	Robust to file drawer
P-curve Analysis			
Right-skew Test	$Z = 4.23$	<.001	Evidential value present
P-curve vs. 33% Power	$Z = 3.45$	<.001	Adequate power

Note: TES = Test of Excess Significance. Fail-safe N indicates the number of null studies required to reduce the effect below significance.

Egger's regression test ( $t = 1.67$ ,  $p = .098$ ) and Begg's correlation ( $\tau = 0.112$ ,  $p = .134$ ) detect no significant funnel plot asymmetry, providing initial evidence against substantial publication bias. Trim-and-fill procedures suggest approximately seven potentially missing studies, but bias-adjusted effect sizes ( $r = 0.434$ ) differ negligibly from observed estimates ( $r = 0.447$ ), indicating minimal bias impact.

PET-PEESE analysis yields corrected estimates ( $\beta_0 = 0.421$ ) closely approximating unadjusted values, further supporting result robustness. Selection models detect minimal selective reporting effects. Cumulative meta-analysis demonstrates stable effect size accumulation over time and across precision levels, inconsistent with small-study bias patterns.

Fail-safe N calculations indicate that thousands of unpublished null studies would be required to reduce findings to non-significance, providing strong evidence for result robustness. P-curve analysis confirms evidential value with characteristic right-skew ( $Z = 4.23$ ,  $p < .001$ ), indicating genuine underlying relationships rather than selective reporting artifacts.

Collectively, these diagnostics provide reasonable confidence that meta-analytic findings reflect genuine population-level relationships rather than publication bias distortions. While some modest bias indicators emerge, corrected estimates remain substantively meaningful and statistically robust.

## 6. Discussion

### 6.1. Theoretical contributions

This meta-analysis makes several substantive theoretical contributions to understanding fan economy phenomena and social media marketing effectiveness. First, we provide comprehensive quantitative evidence that social media marketing activities significantly enhance



brand equity across multiple dimensions, with aggregate effect sizes ranging from  $r = 0.412$  to  $r = 0.489$ . These moderate-to-strong associations demonstrate that entertainment content, interactive mechanisms, trend participation, personalized communication, and facilitated word-of-mouth collectively strengthen brand awareness, associations, perceived quality, and loyalty within digital environments.

Second, we elucidate mediating mechanisms through which fan engagement translates into financial value creation. Brand equity emerges as a critical intermediate outcome, accounting for approximately 50% of total SMMA effects on revenue growth, market capitalization, profitability, and returns. This finding extends brand equity theory into digital contexts, demonstrating that traditional branding principles remain relevant but operate through platform-mediated pathways involving community participation and peer influence dynamics.

Third, we identify important boundary conditions and contingency factors moderating SMMA effectiveness. Industry sector, platform characteristics, and market maturity significantly influence the strength of engagement-performance relationships. Fashion/luxury and entertainment sectors benefit disproportionately due to experiential consumption patterns and symbolic value creation. Visual platforms like Instagram facilitate stronger brand connections than text-based networks. Early-stage markets yield higher returns than mature contexts characterized by competitive saturation and algorithmic challenges.

Fourth, we document temporal decay in social media marketing effectiveness, with recent studies reporting smaller effect sizes than earlier investigations. This saturation phenomenon—consistent with diffusion of innovation theory—suggests that first-mover advantages erode as practices become mainstream. Organizations must continuously innovate content strategies, explore emerging platforms, and develop sophisticated capabilities to maintain competitive differentiation.

Beyond marketing and strategic implications, the findings also intersect with contemporary accounting concerns. Fan-driven brand equity, by amplifying intangible value, affects how firms recognize and test goodwill in acquisition accounting, and may influence discretionary accruals linked to earnings quality (Lev & Gu, 2016). The symbolic capital of loyal fan communities complicates impairment assessments, as valuation models struggle to capture engagement-based assets that are neither contractual nor fully separable (IASB, 2023). Moreover, as ESG reporting frameworks increasingly demand disclosure of social and relational capital, metrics derived from fan engagement analytics could complement conventional brand valuation inputs. Embedding fan-economy dynamics into accounting discourse thus bridges behavioral market outcomes with intangible asset recognition, enriching both financial analysis and sustainability reporting.

These findings collectively advance theoretical understanding of value co-creation in digital ecosystems. The fan economy represents a distinctive paradigm wherein consumers function simultaneously as audiences, collaborators, and advocates. Social media platforms provide infrastructural affordances enabling these multifaceted roles, while organizational marketing strategies catalyze community formation and facilitate value exchange. Success depends not merely on presence or message broadcast, but on authentic engagement, relationship cultivation, and ongoing value delivery that sustains emotional investment.

## 6.2. Practical implications

Meta-analytic findings offer several actionable implications for marketing practitioners and organizational decision-makers. First, substantial evidence supports strategic investment in social media marketing capabilities. With aggregate effect sizes translating into meaningful revenue growth, market value enhancement, and profitability improvements, social media marketing represents a demonstrably effective component of contemporary marketing portfolios. Organizations should allocate sufficient resources—including budget, talent, technology infrastructure, and executive attention—to develop sophisticated fan economy marketing capabilities.

While the aggregated return-on-investment effects are substantial, the current evidence base underrepresents cost heterogeneity across social-media marketing activities. Content production, influencer partnerships, and platform advertising entail variable marginal costs that shape net profitability but are rarely disclosed in primary studies. Consequently, the reported ROI may reflect gross rather than net performance effects. Integrating cost-based moderators or profit-efficiency ratios in future meta-analyses could yield a more holistic evaluation. This would also align with accounting perspectives on marketing capitalization and expense recognition, bridging behavioral returns with fiscal accountability.

Second, successful strategies require multi-dimensional approaches integrating entertainment, interaction, trendiness, customization, and word-of-mouth facilitation. Siloed tactics focusing narrowly on single dimensions demonstrate lower effectiveness than comprehensive strategies leveraging platform affordances holistically. Organizations should invest in creative content development, community management capabilities, real-time responsiveness systems, personalization technologies, and advocacy cultivation programs simultaneously rather than sequentially or in isolation.

Third, platform selection and multi-platform integration demand careful strategic consideration. While presence across multiple networks provides reach advantages, platform-specific optimization proves critical for maximizing engagement quality. Visual platforms like Instagram particularly suit fashion, beauty, and lifestyle categories. Professional networks like LinkedIn serve B2B contexts. Emerging platforms offer first-mover opportunities but require careful experimentation given uncertain longevity and audience characteristics.

Fourth, industry context substantially influences optimal strategies. Experiential categories benefit from emotion-focused content and community cultivation, while functional categories require educational content and utility emphasis. Organizations should tailor approaches to category-specific consumption patterns rather than adopting generic best practices developed in different contexts.

Fifth, measurement and analytics infrastructure requires sophistication beyond vanity metrics. Focusing solely on followers, likes, or impressions provides insufficient guidance for optimization. Organizations need comprehensive measurement frameworks tracking engagement quality, sentiment evolution, community health indicators, and ultimately financial attribution. Advanced analytics capabilities, including econometric modeling, controlled experimentation, and machine learning applications, can substantially improve resource allocation effectiveness.

Sixth, authentic engagement trumps manufactured virality. The strongest effects emerge from genuine dialogue, responsive interaction, and transparent communication. Audiences increasingly detect and reject inauthentic manipulation, favoring brands demonstrating consistent values, reliable quality, and meaningful participation in community life. Long-term relationship cultivation proves more valuable than short-term attention capture.

Beyond firm-level strategies, the findings also carry implications for regulators and accounting standard-setters. Increasing regulatory attention to data privacy directly constrains customization intensity and algorithmic personalization, suggesting that privacy-compliance costs should be recognized as structural moderators of marketing efficiency. At the same time, the growing importance of fan-driven brand equity highlights the need for clearer valuation guidance on intangible assets arising from digital engagement. Standard-setters could consider frameworks that capture the relational and community capital generated through social-media interactions, aligning accounting recognition with economic substance. Integrating fan-economy metrics into disclosure practices would enhance transparency for investors and provide policymakers with more accurate measures of digital value creation.

### 6.3. Limitations

Of the 89 studies retained, 37% were conducted in Asia-Pacific contexts, 28% in North America, 17% in Europe, and 5.6% involved multi-regional samples. Several limitations warrant acknowledgment when interpreting findings. First, meta-analysis aggregates across heterogeneous studies employing diverse methodological approaches, measurement instruments, and analytical procedures. While we implemented rigorous inclusion criteria and sophisticated statistical techniques to address heterogeneity, some residual variance remains unexplained. Future research should pursue more granular investigations of specific mechanisms and boundary conditions.

Second, most included studies employ cross-sectional designs, limiting causal inference. While aggregate patterns suggest that social media marketing influences financial performance through brand equity enhancement, reverse causality and reciprocal relationships remain plausible. Successful firms may invest more heavily in social media marketing, creating bidirectional associations. Longitudinal studies with appropriate lag structures and panel data econometric techniques would strengthen causal claims.

Third, measurement challenges pervade social media marketing research. Engagement metrics provided by platforms may not fully capture meaningful interaction quality. Financial performance indicators reflect multiple simultaneous influences beyond social media marketing. Self-reported data introduces common method bias risks. Objective behavioral data, experimental manipulations, and multi-source measurement approaches would enhance construct validity.

Fourth, publication bias, while extensively assessed, cannot be eliminated as a concern. Journals may preferentially publish significant positive findings, creating upward bias in aggregate effect sizes. While our diagnostic procedures suggest minimal distortion, future research should pursue pre-registered studies and publish null findings to provide comprehensive evidence.

Fifth, generalizability beyond studied contexts remains uncertain. Our sample emphasizes consumer-facing industries in developed markets, with limited representation from B2B contexts, emerging markets, non-profit organizations, and niche platforms. Cross-cultural variations, institutional differences, and platform-specific dynamics may substantially alter relationships. Researchers should examine understudied contexts to assess boundary conditions.

The regional composition of the sample indicates a concentration of Asia-Pacific studies and limited representation from the Middle East or Africa. This asymmetry reflects the uneven diffusion of digital fan economies across markets but also constrains generalizability. Future research should explore contexts where cultural proximity, platform regulation, and resource constraints differ—particularly in emerging Middle Eastern economies where fan-based engagement is rising in sectors such as fintech and sports media.

### 6.4. Future research directions

Several promising avenues warrant investigation. First, process-oriented research examining micro-level mechanisms through which social media interactions influence brand perceptions, emotional connections, and behavioral intentions would complement aggregate effect estimates. Experimental studies manipulating specific content characteristics (emotional tone, interactivity features, personalization depth) could isolate causal pathways and identify optimization opportunities.

Second, longitudinal investigations tracking fan community evolution, engagement pattern dynamics, and financial outcome trajectories would illuminate temporal processes obscured in cross-sectional designs. How do communities form, mature, and potentially decline? What content strategies sustain engagement over extended periods? How do relationships between engagement metrics and financial outcomes change as communities evolve?

Third, comparative analyses across platforms with attention to distinctive affordances would advance understanding of platform-specific optimization strategies. Instagram, TikTok, Twitter, LinkedIn, and emerging networks offer different interaction modalities, content formats, and algorithmic curation approaches. Platform-specific research could identify when and why particular networks suit specific organizational objectives.

Fourth, investigations of negative outcomes and backfire effects would provide a balanced perspective. Not all social media marketing succeeds; some campaigns generate consumer backlash, brand damage, and financial losses. Understanding failure modes, risk factors, and crisis management approaches would enhance practical guidance.

Fifth, emerging technologies, including artificial intelligence, augmented reality, and blockchain-based platforms, may fundamentally transform fan economy dynamics. Proactive research examining how these innovations influence engagement patterns, value creation mechanisms, and financial returns would prepare organizations for evolving digital landscapes.

Sixth, cross-level investigations linking individual-level psychological processes (identity, emotion, motivation) to group-level community dynamics and organization-level performance outcomes would integrate micro and macro perspectives. Multi-level modeling approaches could clarify how individual fans aggregate into collective communities, generating market-level impacts.

## 7. Conclusion

The fan economy represents a transformative paradigm wherein passionate consumer communities generate substantial economic value through sustained engagement with brands and content creators. This meta-analysis of 89 empirical studies provides comprehensive quantitative evidence that social media marketing activities significantly enhance brand equity, which in turn drives multiple financial performance outcomes, including revenue growth, market capitalization, and profitability. Effect sizes are classified as moderate to strong, indicating substantively meaningful relationships that justify strategic investments in fan-centric marketing approaches.

Entertainment content, interactive mechanisms, trend participation, personalized communication, and electronic word-of-mouth collectively strengthen brand awareness, associations, perceived quality, and loyalty. These dimensions operate synergistically rather than independently, suggesting that comprehensive multi-faceted strategies deliver superior returns compared to narrow tactical implementations. Brand equity emerges as a critical mediating mechanism, accounting for approximately half of total effects and highlighting the importance of long-term relationship building over short-term transactional objectives.

Importantly, effectiveness varies substantially across contexts. Experiential industries, visual platforms, and emerging markets demonstrate stronger associations, while functional categories, mature contexts, and text-based networks show more modest returns. Temporal decay in effectiveness as social media marketing becomes ubiquitous underscores the importance of continuous innovation and strategic differentiation. Organizations succeeding in fan economy contexts cultivate authentic engagement, develop sophisticated capabilities, and pursue integrated multi-platform strategies adapted to specific industry and market conditions.

As digital transformation continues to reshape commerce, entertainment, and social interaction, fan economy phenomena will likely intensify and diversify. Organizations that recognize social media not merely as promotional channels but as community infrastructure enabling

value co-creation will position themselves advantageously. Success requires fundamental shifts in marketing philosophy—from broadcast messaging to dialogue facilitation, from customer acquisition to relationship cultivation, from transactional exchanges to experiential participation.

This research provides evidence-based foundation supporting strategic investments in fan economy marketing capabilities while highlighting important boundary conditions, mediating mechanisms, and optimization opportunities. We hope these insights stimulate additional scholarship advancing theoretical understanding and practical application of social media marketing within evolving digital ecosystems.

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