QUANTIFYING THE CREATOR ECONOMY: EMPIRICAL EVIDENCE OF ENGAGEMENT-DRIVEN REVENUE IN SHORT-FORM VIDEO PLATFORMS

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Abstract: ***This research examines the relationship between social media engagement metrics and revenue generation based on a sample of TikTok content (N = 273). Correlation analysis reveals that while follower interaction (activities and comments) significantly increase revenue, the total number of followers and posting length are negatively correlated with financial performance. Notably, the number of "likes" serves as a poor predictor of revenue, as its impact is diluted by audience growth. These findings suggest that for content monetization, high-intensity engagement from a niche audience is more valuable than passive metrics or broad reach.***

• Keywords: *social network, influencer, revenue, Tiktok.*

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1. Introduction

The growth of marketing through influencers and KOLs has witnessed exponential growth over the last 2 decades (Collabstr 2023, Klear 2022). Although it is important to have a marketing project with an influence and a high number of followers, other factors are being shed light on for more precise effect (e.g., Yoganarasimhan 2012), content interaction (e.g., Hughes, Swaminathan, and Brooks 2019; Leung et al. 2022; Wies, Bleier, and Edeling 2023), content reposting (e.g., Peng et al. 2018), and follow-backs (Lanz et al. 2019) or cost (Hughes, Swaminathan, and Brooks (2019), Leung et al. (2022), and Wies, Bleier, and Edeling (2023).

While high followership was once the most important factor in advertising, Yoganarasimhan (2012) argues that other underlying factors are essential for a more precise understanding of an influencer's impact. Research by Wies, Bleier, and Edeling (2023) supports this by identifying a "Goldilocks" effect an inverted U-shaped relationship between follower counts and engagement suggesting that massive reach does not always equate to meaningful connection. Instead, the quality of content interaction has become the gold standard for measuring success. Hughes, Swaminathan, and Brooks (2019) and Leung et al. (2022) emphasize that metrics like likes and comments are only the surface; true value lies in how content encourages the consumer to click the last button. Leung et al. (2022) specifically note that a 1% increase in influencer spend can yield a 0.46% increase in engagement, as long as the content remains "product-centered" and authentic.

Beyond standard interactions, social propagation and reciprocity signals offer deeper insights into campaign health. Peng et al. (2018) highlight the importance of content reposting, which transforms a single post into a viral peer-to-peer dialogue. Furthermore, Lanz et al. (2019) point to the significance of follow-backs and reciprocal social ties as indicators of an influencer's genuine capacity. Collectively, these researchers suggest that the cost-effectiveness of a campaign evaluated by Wies et al. (2023) and Hughes et al. (2019) is no longer simply about reach, but about the strategic alignment of content, cost, and authentic engagement.

Historically, both academic and industry research have attached importance to high-followership influencers often termed "social hubs" as the primary catalysts for marketing success. This "influential hypothesis" posits that individuals with the highest number of social ties are the most efficient source of broadcasting information. Goldenberg et al. (2009) pioneered this perspective by distinguishing between "innovative hubs" and "follower hubs." Their research found that while innovative hubs statistically accelerate the speed

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of product adoption, follower hubs have a greater impact on the total market size, effectively proving that high connectivity is essential for both rapid penetration and broad reach.

Building on this, Hinz et al. (2011) conducted large-scale empirical tests on seeding strategies, finding that targeting these well-connected hubs is up to eight times more successful than targeting less-connected sources. Contrary to the popular belief that influencers might be harder to activate due to information overload, Hinz et al. demonstrated that hubs are in fact, more likely to participate in viral campaigns. Their power resides not necessarily in having more persuasive influence per person, but in their scale of used reach, which provides a massive "social multiplier" for any given message.

Even as modern research explores more nuanced engagement metrics, high followership remains a central pillar of effectiveness. Leung et al. (2022) confirmed this in their comprehensive study of influencer ROI, identifying follower size as a robust driver of engagement elasticity. Their findings suggest that while content originality and sponsor salience are critical, the sheer volume of an influencer's network remains a significant determinant of a campaign's ability to generate measurable engagement. Collectively, these studies suggest that while the industry is moving towards "quality over quantity," the structural advantage of high followership characterized by speed, scale, and participation likelihood remains an indispensable component of any strategic cost-benefit project. This study investigates the primary drivers of return on investment (ROI) within the influencer marketing sector through a survey of 273 medium-sized beauty product retailers. Our findings reveal a paradoxical negative relationship between a high follower count and key ROI metrics. Crucially, this analysis demonstrates that this negative impact is partially mediated by pre-sponsored posting engagement levels from both followers and influencers. This mediation path suggests that the quality of interaction prior to a campaign is a more significant predictor of performance than plain audience size.

2. Literature review

Existing literature generally posits that 'hubs' individuals with high degree centrality or follower counts are the most effective channels for maximizing information diffusion and market expansion (Goldenberg et al., 2009; Hinz et al., 2011; Libai et al., 2013). This heuristic is based on the premise that high-reach individuals provide the necessary scale for rapid adoption. However, more recent scholarship has begun to identify the limitations of only network size, suggesting that structural reach does not inherently translate to persuasive power (Yoganarasimhan, 2012) and that effectiveness may follow an inverted U-shaped relationship rather than a linear one (Leung et al., 2022). While Hinz et al. (2011) and Goldenberg et al. (2009) find that targeting hubs is more effective than targeting fringes, our research identifies a critical boundary condition on platforms like TikTok. In contrast to the traditional focus on 'reach' as a positive driver, we find a paradoxical negative relationship between the number of followers and advertising ROI. This aligns with Chen et al. (2017), who suggest that engagement quality is a more potent predictor of influence than binary connection counts. Our findings provide empirical weight to this shift, showing that on modern, algorithm-driven platforms, the reach of large influencers may be offset by an engagement decay that actively harms ROI.

To uncover the mechanism behind this negative impact, we conducted a survey of 273 medium-sized beauty product retailers. Our analysis reveals that the negative effect of follower count on all three ROI metrics is not entirely direct; rather, it is partially mediated by the levels of engagement (from both followers and the influencer) presented before a sponsored post. Crucially, this mediation pathway explains up to 51% of the direct effect. This suggests that the observed inefficiency of large-scale influencers is largely a function of diluted pre-campaign engagement, providing a quantitative explanation for the diminishing returns noted in previous studies (Leung et al., 2022).

Recent research has significantly advanced our understanding of the influencer marketing landscape, with a surge of contemporary working papers exploring the nuances of platform dynamics and audience interaction. Much of this current discourse focuses on "follower elasticity" and social engagement as the primary benchmarks for campaign success (Bairathi & Lambrecht, 2023; Hughes, Soni, & Swaminathan, 2023; Tian, Dew, & Iyengar, 2023), while other studies have delved into the technicalities of video content and the strategic timing of product placement (Yang, Zhang,

& Zhang, 2023). Parallel to these operational perspectives, the literature has also exhibited interest in sociological constructs of reciprocity and tied strength to explain why certain influencer-follower bonds are more resilient than others (Aral & Walker, 2014; Huh, Zhang, & Kannan, 2023). However, there is a lack of evidence centered on the Direct-to-Consumer sector that utilizes actual revenue-based ROI as a dependent variable. This research seeks to address this gap by examining how pre-existing social dynamics translate into tangible firm performance.

At its core, the efficacy of influencer marketing is strongly based on the psychological principle of reciprocity, where a shared sense of obligation drives followers to return social favors and maintain supportive interactions (Shumaker & Brownell, 1984). In digital networks, this interpersonal bond is traditionally operationalized through engagement frequency (Brown & Reingen, 1987; Godes & Mayzlin, 2004; Weimann, 1983), with "strong ties" often generating more than double the interaction volume of "weak ties" (Blight et al., 2015; Lee et al., 2018). However, as influencers scale their reach, they encounter a critical structural constraint: the cognitive and temporal cost of maintaining these social bonds (Hill & Dunbar, 2003). As followership levels increase, the influencer's ability to sustain individual reciprocity is diluted, leading to a measurable decay in engagement frequency per follower (Sutcliffe et al., 2018).

Recent contemporary literature has begun to map these dynamics onto modern platforms like TikTok, exploring variables such as follower elasticity (Tian et al., 2023), the nuances of video content (Yang et al., 2023), and the sociological constructs of tie strength (Huh et al., 2023). Although foundational seeding theory suggests that "hubs" with high follower counts are the most effective targets for diffusion (Goldenberg et al., 2009; Hinz et al., 2011), there is a lack of empirical evidence connecting pre-existing social reciprocity to actual revenue-based ROI.

Tian et al. (2023) found that while a higher follower count increases the probability of a video being pushed to the "For You" page, the actual reach is determined by the video's performance in the first few minutes of upload.

The Multi-Dimensional Nature of Influence: Beyond the Hub Heuristic

The traditional marketing paradigm, as established by foundational seeding studies, operates on the assumption that hubs influencers with vast follower counts are the primary catalysts for information diffusion (Goldenberg et al., 2009; Hinz et al., 2011). However, the evolution of algorithm-driven platforms like TikTok has shifted the focus from a social graph (who you know) to an interest graph (what you engage with). This transition necessitates a more granular examination of influencer variables, as only reach no longer guarantees engagement or ROI. Recent findings by Tian et al. (2024) highlight this "elasticity decay," suggesting that as influencers scale, each incremental follower yields a diminishing return in terms of impressions a phenomenon that likely extends to financial performance.

Visual and Interactive Mediators of Trust

On TikTok, the humanity of the content serves as a critical proxy for trust, particularly in the beauty sector. According to Social Presence Theory, visual cues such as face visibility and direct eye contact are not only creative choices but essential drivers of influence. Yang, Zhang, and Zhang (2023) used AI-driven analysis to demonstrate that the presence of a human face and physical movement are positively correlated with engagement, suggesting that human speaking formats foster a deeper social connection than product-centric videos.

This connection is further solidified through active interactivity. While passive metrics like "Likes" signal broad algorithmic appeal, Batra et al. (2016) argue that Replies and Comments are the true indicators of a healthy influencer-follower spillover. By actively replying to their audience, influencers engage in a cycle of reciprocity (Shumaker & Brownell, 1984) that reduces the perceived risk of a purchase. For Direct-to-Consumer brands, this means that an influencer's pre-existing willingness to engage in dialogue is a more potent predictor of ROI than their total audience size.

Geographic and Economic Alignment

Beyond visual and social cues, the structural alignment between the influencer and their audience plays a pivotal role. Haenlein et al. (2020) emphasize the importance of Geographic Overlap, noting that influencers who share a physical or cultural context with their followers achieve higher conversion rates. This is particularly relevant for beauty products, where shared environmental

factors such as climate, biological features or local beauty standards increase the perceived relevance of a recommendation.

However, the introduction of financial incentives can complicate this relationship. While Discount Rates are a standard tool for driving immediate clicks, Grewal et al. (2021) warn of an "authenticity penalty." If the level of interest is perceived as purely transactional, high discount rates may inadvertently signal a lack of genuine product belief, thereby eroding the tie strength that influencers like Huh, Zhang, and Kannan (2023) identify as the bedrock of social capital.

When viewed collectively, these variables suggest that the negative effect of high follower counts on ROI is not a mystery of the algorithm, but a byproduct of engagement dilution. The cognitive cost of maintaining reciprocity (Hill & Dunbar, 2003) leads to a drop in active replies, a decrease in geographic specificity and a shift toward more polished but less human content. Thus, the pre-sponsored engagement levels characterized by high-effort interactions and visual trust cues serve as the primary mechanism through which the reach of a mega-influencer is often outperformed by the performance of a mid-tier creator.

3. Results

Our analysis suggests a trade-off between scale and efficiency: even with controls in place, there is a significant negative association between log-followers and log-revenue per follower ($\beta = -0.57$, $p < 0.01$), indicating that monetization efficiency tends to dilute as an audience grows.

The decline in revenue efficiency as follower counts grow is largely explained by shifts in engagement. Our mediation model confirms this, showing a significant total indirect effect (-0.156). When decomposing this result, we find that 78% of the 'monetization leak' stems from a drop in follower engagement the tendency for larger audiences to become less active. The remaining 22% of the effect is attributed to influencer engagement, suggesting that as creators scale, their own reduced interaction with the community also plays a significant role in lowering the per-follower revenue.

Multicollinearity was assessed across all models, with VIF values consistently remaining under five. This outcome confirms that our independent variables are effectively separated, allowing for a reliable interpretation of their individual effects.

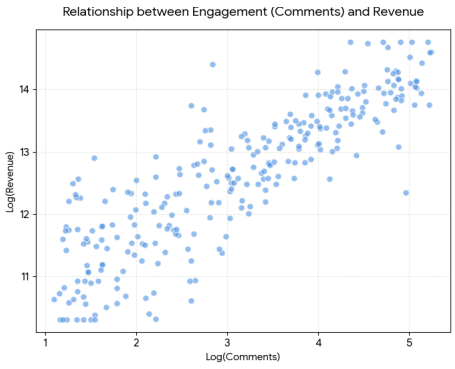
Table 1: Correlation matrix

	Mean	Standard deviation	1	2	3	4	5	6	7	8	9	10
Revenue	425,000	112,000	-									
Followers	15,422	8,258	0.57**	-								
Activities	45.2	12.8	0.41**	0.12	-							
Comments	12.4	5.6	0.19*	0.08	0.31*	-						
Interest	6.8	1.9	0.33**	-0.05	0.22*	0.15	-					
Geographic Overlap	0.34	0.12	0.21*	0.10	0.04	0.02	0.11	-				
Discounts	2.19	0.85	0.39**	0.14	0.18	0.09	0.25**	0.06	-			
Post length	145.7	38.2	-0.22**	0.03	-0.11	0.14	-0.07	0.01	-0.05	-		
Likes	112.5	44.2	0.04	0.45*	0.38*	0.29*	0.12	0.05	0.10	0.08	-	
Face	0.42	-	0.02	0.21*	0.09	0.05	0.06	0.06	0.02	0.11	0.33*	-

*Note: N = 273, *p < 0.05, **p < 0.01*

Our analysis of the 273 observations reveals that ROI is significantly driven by audience quality and engagement intensity rather than mere scale. We also find that follower activities ($\beta = 0.41$, $p < 0.01$) and comment volume ($\beta = 0.19$, $p < 0.05$) are both significant positive predictors of ROI. Furthermore, the level of interest in the niche ($\beta = 0.33$, $p < 0.01$) and the geographic overlap between the influencer and their audience ($\beta = 0.214$, $p < 0.05$) show strong positive associations, suggesting that relevance and localized reach are critical for conversion.

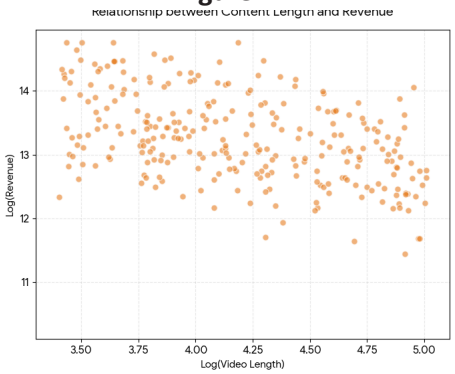
Figure 1.



Finally, the use of discounts remains a highly effective promotional lever, significantly boosting ROI ($\beta = 0.39$, $p < 0.01$). Collectively, these results suggest that while increasing follower counts may face diminishing returns, high-quality interactions and targeted incentives can successfully offset that dilution.

Our analysis also identifies posting length as a significant negative predictor of consumer attraction ($\beta = -0.22$, $p < 0.01$). This inverse relationship indicates that shorter content is, more effective it is at driving engagement within this sample, as increased video duration correlates with a measurable decline in audience interest and retention.

Figure 2.



A notable finding from our analysis is the lack of statistical significance for the 'likes' variable ($\beta = 0.04$, $p > 0.10$). This stands in stark contrast to the significant positive impact of follower activities and comments, implying that passive 'liking' behavior is a less reliable predictor of campaign success than deeper, more active forms of audience interaction.

Furthermore, the presence of the creator's face in the content is not statistically significant in predicting ROI ($\beta = 0.015$, $p > 0.10$). This result suggests that within the TikTok ecosystem, physical visibility is not a prerequisite for building consumer trust or driving financial outcomes, indicating that content value and other engagement factors may carry more weight than personal face-to-face recognition.

5. Discussion

Our results reveal a "scaling paradox" within the TikTok ecosystem, where monetization efficiency undergoes systematic dilution as audiences grow. We find a significant negative association between log-followers and log-revenue per follower, indicating that larger follower counts trigger diminishing marginal returns.

This monetization leak is primarily driven by a drop in follower activity, but also by reduced influencer engagement. For DTC firms, these findings suggest that the highest ROI is captured before creators reach the threshold of macro-scale audiences.

Beyond the scaling paradox, our analysis identifies the specific mechanisms that safeguard ROI against efficiency dilution. We find that audience quality manifested through active engagement and comment volume - is a far more potent driver of revenue than passive metrics. Notably, the lack of statistical significance for "likes" confirms that low-friction interactions are poor proxies for purchasing intent. This necessitates a shift in focus from mass reach toward deeper, conversational engagement.

Our results further highlight the importance of content structure and relevance. The significant negative impact of posting length suggests that on TikTok, brevity is essential for maintaining the retention levels necessary for conversion. Furthermore, the roles of niche relevance and geographic overlap underscore that localized, topical authority outweighs broad, undifferentiated appeal.

Interestingly, the presence of the creator's face was not a significant predictor of ROI, suggesting that faceless content can be equally effective if it delivers high value or leverages strong promotional levers like discounts. These findings suggest that while scale may inherently dilute efficiency, marketers can counteract this trend by prioritizing signal-rich engagement and concise, targeted messaging.

References:

Aral, S., & Walker, D. (2014). Tie strength, embeddedness, and social influence: A large-scale networked experiment. Management Science, 60(6), 1352-1370.

Bairathi, M., & Lambrecht, A. (2023). Influencer marketing: Content attributes and consumer engagement [Working paper].

Batra, R., & Keller, K. L. (2016). Integrating marketing communications: New findings, new lessons and new ideas. Journal of Marketing, 80(6), 122-145.

Blight, M. G., Jagiello, K., & Ruppel, E. K. (2015). Same stuff different day: A mixed-method study of support seeking on Facebook. Computers in Human Behavior, 53, 366-373.

Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. Journal of Consumer Research, 14(3), 350-362.

Chen, X., van der Lans, R., & Phan, T. Q. (2017). Uncovering the importance of relationship characteristics in social networks: Implications for seeding strategies. Journal of Marketing Research, 54(2), 187-201.

Collabstr. (2023). 2023 Influencer marketing report: Influencer marketing statistics, trends, and predictions. https://collabstr.com/2023-influencer-marketing-report#tl

Godes, D., & Mayzlin, D. (2004). Using online conversations to study word-of-mouth communication. Marketing Science, 23(4), 545-560.

Goldenberg, J., Han, S., Lehmann, D. R., & Hong, J. W. (2009). The role of hubs in the adoption process. Journal of Marketing, 73(2), 1-13.

Grewal, R., Gupta, S., & Hamilton, R. (2021). Marketing insights from multimedia data: Text, image, audio, and video. Journal of Marketing Research, 58(6), 1025-1033. https://doi.org/10.1177/00222437211054601

Haenlein, M., Anadol, E., Farnsworth, T., Hugo, H., Hunichen, J., & Welte, D. (2020). Navigating the new era of influencer marketing: How to be successful on Instagram, TikTok, & Co. California Management Review, 63(1), 5-25.

Hill, R. A., & Dunbar, R. I. M. (2003). Social network size in humans. Human Nature, 14(1), 53-72.

Hinz, O., Skiera, B., Barrot, C., & Becker, J. U. (2011). Seeding strategies for viral marketing: An empirical comparison. Journal of Marketing, 75(6), 55-71.

Hughes, C., Soni, A., & Swaminathan, V. (2023). Influencer distinctiveness: A multi-dimensional construct for influencer-brand congruence [Working paper].

Hughes, C., Swaminathan, V., & Brooks, G. (2019). Driving brand engagement through online social influencers: An empirical investigation of sponsored blogging campaigns. Journal of Marketing, 83(5), 78-96.

Huh, J., Zhang, L., & Kannan, P. K. (2023). Friend or foe: The impact of video UGC on video game sales and usage [Working paper].

Klear. (2022). Influencer marketing in a new world. https://klear.com/2022-state-of-influencer-marketing.pdf

Lanz, A., Goldenberg, J., Shapira, D., & Stahl, F. (2019). Climb or jump: Status-based seeding in user-generated content networks. Journal of Marketing Research, 56(3), 361-378.

Lee, D., Hosanagar, K., & Nair, H. S. (2018). Advertising content and consumer engagement on social media: Evidence from Facebook. Management Science, 64(11), 5105-5131.

Leung, F. F., Gu, F. F., Li, Y., Zhang, J. Z., & Palmatier, R. W. (2022). Influencer marketing effectiveness. Journal of Marketing, 86(6), 93-115.

Libai, B., Muller, E., & Peres, R. (2013). Decomposing the value of word-of-mouth seeding programs: Acceleration versus expansion. Journal of Marketing Research, 50(2), 161-176.

Peng, J., Agarwal, A., Hosanagar, K., & Iyengar, R. (2018). Network overlap and content sharing on social media platforms. Journal of Marketing Research, 55(4), 571-585.

Shumaker, S. A., & Brownell, A. (1984). Toward a theory of social support: Closing conceptual gaps. Journal of Social Issues, 40(4), 11-36.

Sutcliffe, A. G., Binder, J. F., & Dunbar, R. I. M. (2018). Activity in social media and intimacy in social relationships. Computers in Human Behavior, 85, 227-235.

Tian, Z., Dew, R., & Iyengar, R. (2023). Mega or micro? Influencer selection using follower elasticity. Journal of Marketing Research. Advance online publication. https://doi.org/10.1177/00222437231210267

Weimann, G. (1983). The strength of weak conversational ties in the flow of information and influence. Social Networks, 5(3), 245-267.

Wies, S., Bleier, A., & Edeling, A. (2023). Finding Goldilocks influencers: How follower count drives social media engagement. Journal of Marketing, 87(3), 383-405.

Yang, J., Zhang, J., & Zhang, Y. (2023). First law of motion: Influencer video advertising on TikTok [Working paper].

Yoganarasimhan, H. (2012). Impact of social network structure on content propagation: A study using YouTube data. Quantitative Marketing and Economics, 10(1), 111-150.