

# Production Cost Structure, Sales Growth, Inflation, and Profitability in Food and Beverage Companies

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## ABSTRACT

**Purpose:** This study examines the influence of audience segmentation and content innovation on TikTok marketing optimization among MSMEs in Pangkal Pinang City, Indonesia, addressing the limited empirical evidence in this regional digital marketing context.

**Methodology:** A quantitative explanatory design was employed. Data were collected from 100 MSME owners and managers through Likert-scale questionnaires using purposive sampling methods. Validity, reliability, classical assumption tests, and multiple linear regressions were conducted using IBM SPSS Statistics 25.

**Results:** Audience segmentation and content innovation both had significantly positive effects on TikTok marketing optimization. Together, they explained 81.3% of the variance, with content innovation emerging as the dominant predictor.

**Conclusions:** Audience segmentation and content innovation are important factors in optimizing TikTok marketing among MSMEs, with creative content capabilities playing the strongest role in improving marketing performance.

**Limitations:** This study was limited to one city, used only two predictors, and relied on cross-sectional self-report data, which may limit its generalizability and causal interpretation.

**Contribution:** This study extends the social media marketing literature by applying the Resource-Based View, Uses and Gratification Theory, and STP framework in an MSME–TikTok context, while offering practical insights for small business digital marketing strategies.

**Keywords:** *Audience Segmentation, Content Innovation, Digital Marketing, Indonesia, MSMEs, Social Media Marketing, TikTok Marketing*

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## 1. Introduction

The rapid proliferation of short-form video platforms has fundamentally reconfigured the digital marketing landscape for small businesses worldwide. TikTok, with over 1.6 billion monthly active users

worldwide, has emerged as a particularly consequential platform for Micro, Small, and Medium Enterprises (MSMEs) seeking to expand market reach, build brand awareness, and drive consumer engagement at relatively low cost ([Appel, Grewal, Hadi, & Stephen, 2020](#); [Zhang, Guo, Hu, & Liu, 2017](#)). Unlike conventional social media channels that privilege text or static imagery, TikTok's algorithm-driven, interest-based content distribution enables even newly established accounts to achieve organic viral reach, making it a structurally distinct marketing environment that rewards creative competence over advertising budget ([Chetioui, Butt, & Lebdaoui, 2021](#); [Kartobi & Dewi, 2025](#)).

In Indonesia, TikTok's trajectory has been especially pronounced. Indonesia ranks among the top three global markets by TikTok user base, and the platform's commercial ecosystem, TikTok Shop, has become deeply integrated with MSME commerce, enabling in-app product discovery, review, and purchase ([Rahman, Rahayu, & Hendrayati, 2025](#)). Pangkal Pinang City, the capital of Bangka Belitung Province, mirrors this national trend, with a growing number of local MSME operators adopting TikTok as their primary or supplementary marketing medium. However, empirical evidence suggests that adoption alone does not ensure effectiveness; many MSMEs fail to realize the platform's commercial potential due to limited strategic capabilities in audience targeting and content creation ([Setiawan, Wardhani, & Yanto, 2025](#); [Tapa, 2025](#)).

Two strategic capabilities are particularly salient in this context. First, audience segmentation, the systematic grouping of prospective consumers based on demographic, geographic, psychographic, and behavioral characteristics, is a foundational principle of marketing strategies ([Kotler, Keller, & Chernev, 2022](#)). On TikTok, whose recommendation algorithm curates personalized content feeds based on inferred user interests and interaction patterns, precise audience segmentation enables MSMEs to tailor content, timing, and messaging to maximize relevance and engagement for specific user groups ([Dwivedi et al., 2021](#); [Khasanah, 2024](#)). Second, content innovation, the capacity to generate creative, original, trend-responsive video content, is central to TikTok's value proposition as an entertainment-first platform ([Judijanto & Hutauruk, 2025](#); [Odoom, 2025](#)). Users on TikTok actively curate their content consumption based on gratification motives [Katz, Blumler, and Gurevitch \(1973\)](#), implying that content failing to deliver entertainment, informational, or social value is rapidly dismissed.

Despite the theoretical plausibility and practical importance of these two capabilities, empirical research specifically examining their combined influence on TikTok marketing optimization in the Indonesian MSME context is limited. Existing studies, such as [Dwivedi et al. \(2021\)](#), [Vrontis, Makrides, Christofi, and Thrassou \(2021\)](#), and [De Veirman and Hudders \(2020\)](#), have investigated audience targeting and content quality in broader social media and digital advertising contexts, but have not specifically addressed the interactive dynamics of segmentation and content innovation within the TikTok ecosystem as experienced by small business operators in Indonesian regional cities. This represents a meaningful research gap, given that the platform dynamics, user demographics, and business resource constraints of Indonesian MSMEs differ substantially from the North American and European contexts that dominate the existing literature.

This study addresses this gap by pursuing four research objectives: (1) to examine the effect of audience segmentation on TikTok marketing optimization among MSMEs in Pangkal Pinang City; (2) to examine the effect of content innovation on TikTok marketing optimization; (3) to examine the simultaneous effect of both variables; and (4) to assess the relative explanatory contribution of each predictor. By situating the analysis within a Resource-Based View (RBV) framework [Barney \(1991\)](#), supplemented by uses and gratification theory [Katz et al. \(1973\)](#) and the segmentation-targeting-positioning (STP) paradigm [Kotler et al. \(2022\)](#), this study advances both theoretical understanding and practical guidance for MSME digital marketing strategy. The remainder of this paper is organized as follows. Section 2 reviews the theoretical foundations and prior empirical literature and develops the research hypotheses. Section 3 describes the research methodology used in this study. Section 4 presents and discusses the empirical results of the study. Section 5 concludes the paper and discusses its limitations and directions for future research.

## 2. Literature Review and Hypothesis/es Development

### 2.1 Theoretical Framework

#### 2.1.1 Resource-Based View

The Resource-Based View (RBV), originally articulated by [Barney \(1991\)](#) and subsequently extended by numerous scholars, posits that sustained competitive advantage derives from the possession of resources and capabilities that are valuable, rare, inimitable, and non-substitutable (VRIN). Applied to MSME digital marketing, RBV implies that the ability to effectively segment audiences and innovate content constitutes a form of dynamic capability [Sumiansi, Fadjjar, Sutomo, and Wanti \(2025\)](#) that can differentiate a firm's marketing effectiveness from that of competitors. Audience segmentation capability reflects a firm's market intelligence resource and the organized knowledge of customer characteristics and preferences, while content innovation capability represents a creative and technological resource that enables differentiated value delivery through digital media. Thus, RBV provides the primary theoretical lens for explaining why differences in segmentation and content capabilities produce heterogeneous TikTok marketing outcomes across MSMEs ([Zhang et al., 2017](#)).

#### 2.1.2 Uses and Gratification Theory

Uses and Gratification Theory (UGT), developed by [Katz et al. \(1973\)](#) and subsequently applied to social media contexts by researchers including [Alhabash and Ma \(2017\)](#), holds that media consumers are active, goal-directed agents who select media experiences based on anticipated gratifications, including information seeking, entertainment, social interaction, and identity expression. In the TikTok context, UGT has been applied to explain user content selection and engagement behaviors ([Adistri & Rusman, 2024](#); [Omar & Dequan, 2020](#)). From a marketing perspective, UGT implies that content is more likely to be watched, liked, shared, and acted upon when it successfully delivers the anticipated gratifications to specific audience segments. Accordingly, the alignment between audience-specific gratification needs (identified through segmentation) and content design (enabled by innovation) is a critical determinant of effective marketing. This theoretical link between UGT and audience segmentation-content innovation is a novel contribution to the current framework.

#### 2.1.3 Segmentation, Targeting, and Positioning

The STP framework, as systematized by [Kotler et al. \(2022\)](#), operationalizes the process through which firms translate market heterogeneity into targeted marketing actions. Segmentation identifies and characterizes distinct consumer subgroups, targeting selects the most strategically relevant segments, and positioning constructs a differentiated brand or product image within the mental frameworks of target consumers. In the TikTok environment, STP manifests through algorithmic content recommendation (which effectively performs targeting based on users' historical interactions), creator-side audience analysis (using TikTok Analytics and Creator Center data), and content design choices that communicate specific brand positions to specific user communities. Thus, the STP framework operationalizes the audience segmentation variable in this study as the organized capability of MSME operators to conduct market analysis, define target segments, and adjust content accordingly.

### 2.2 TikTok Marketing Optimization

TikTok marketing optimization refers to the degree to which MSME operators effectively leverage TikTok's platform features, algorithmic dynamics, and user behavior to achieve marketing objectives, including increased brand awareness, follower growth, engagement (likes, comments, shares, saves), content reach, and consumer purchase intention ([Chetioui et al., 2021](#); [Laraskana & Sakir, 2025](#)). As a performance construct, TikTok marketing optimization reflects both platform-specific behavioral outcomes (e.g., video completion rates, hashtag performance, duet/stitch participation) and business-level marketing results (e.g., traffic conversion, lead generation, and product inquiries). Consistent with [Appel et al. \(2020\)](#), marketing optimization on social media is an inherently dynamic process that requires continuous adaptation to platform algorithm changes, emerging content formats (e.g., TikTok Live, duets, challenges), and shifting audience preferences. For Indonesian MSMEs, whose resources for professional marketing management are typically constrained, the ability to optimize TikTok marketing represents a particularly valuable and consequential capability ([Safrianto, Herawati, & Fauzan, 2024](#)).

### 2.3 Audience Segmentation

Audience segmentation involves dividing a heterogeneous market into distinct subgroups or segments whose members share common characteristics, needs, or behavioral patterns that distinguish them from other segments ([Kotler et al., 2022](#)). In digital and social media marketing, segmentation has evolved beyond traditional demographic criteria to encompass psychographic (values, lifestyles, and personality traits), behavioral (usage patterns, purchase history, and interaction habits), and technographic (device preferences and platform usage) dimensions ([Dwivedi et al., 2021](#)). On TikTok, effective segmentation requires MSME operators to analyze data from TikTok Analytics (follower demographics, peak activity times, content performance by audience type) and leverage TikTok's advertising tools (Custom Audiences, Lookalike Audiences) to refine targeting ([Khasanah, 2024](#); [Putri, Melano, Wijaksono, & Arifputri, 2024](#)).

Empirically, studies in both developed and emerging market contexts support a positive relationship between audience segmentation capabilities and digital marketing effectiveness. [Dwivedi et al. \(2021\)](#) established that targeted and personalized digital marketing content produces superior engagement relative to untargeted mass communication. [Vrontis et al. \(2021\)](#) demonstrated that social media personalization based on audience profiling significantly enhances user engagement and brand loyalty. In the Indonesian context, [Putri et al. \(2024\)](#) found that content marketing strategies informed by audience analysis generated higher engagement rates on TikTok. [De Veirman and Hudders \(2020\)](#) further established that audience-tailored advertising formats improve advertising literacy outcomes and positive brand attitudes among young social-media users.

*H<sub>1</sub>*: Audience segmentation has a significant positive effect on TikTok marketing optimization among the MSMEs in Pangkal Pinang City.

### 2.4 Content Innovation

Content innovation refers to MSME operators' ability to create original, creative, visually compelling, trend-responsive video content that aligns with TikTok's interactive norms ([Judijanto & Hutaaruk, 2025](#); [Odoom, 2025](#)). Content innovation encompasses multiple dimensions: ideational novelty (generating fresh concepts rather than replicating competitors), aesthetic creativity (visual quality, editing sophistication, and use of TikTok-native features such as effects, transitions, and sounds), informational relevance (providing genuine value to target audiences), trend integration (participation in viral formats, challenges, and sounds), and interactivity facilitation (prompting user responses through questions, calls to action, or duet invitations) ([Rozaq, Dianita, Wisudawaty, & Adim, 2025](#); [Tafesse & Dayan, 2023](#)).

The importance of content innovation on TikTok derives from the platform's fundamental architecture: unlike search- or follow-based platforms, TikTok's For You Page (FYP) algorithm distributes content primarily based on engagement signals, making content quality and uniqueness rather than follower count the primary driver of organic reach ([Zhang et al., 2017](#)). Accordingly, MSMEs with higher content innovation capabilities are expected to generate stronger engagement responses, achieve wider algorithmic distribution, and accumulate larger and more loyal follower bases. Empirical support comes from [Akbari, Jastacia, Setiawan, and Ningsih \(2022\)](#), who demonstrated that creative, trend-aligned content on TikTok significantly increases brand awareness and user interaction in the context of higher education marketing. [Rozaq et al. \(2025\)](#) found that interactive and innovative content substantially boosts audience engagement on short video platforms. [Putra, Sulistyani, Ramadhan, and Hidayat \(2025\)](#) similarly reported that content innovation positively influences digital marketing effectiveness and consumer loyalty on TikTok.

*H<sub>2</sub>*: Content innovation has a significant positive effect on TikTok marketing optimization among the MSMEs in Pangkal Pinang City.

Drawing on the integrated theoretical framework and the two directional hypotheses above, the simultaneous hypothesis is as follows:

*H<sub>3</sub>*: Audience segmentation and content innovation simultaneously and significantly influence TikTok marketing optimization among MSMEs in Pangkal Pinang City:

### 3. Methodology

#### 3.1 Research Design

This study employed a quantitative explanatory research design. Explanatory (causal) research is appropriate because the study aims not merely to describe the levels of audience segmentation, content innovation, and TikTok marketing optimization, but also to examine and explain the causal relationships between these variables through hypothesis testing. A survey-based, cross-sectional data collection approach was adopted, consistent with the standard practice in quantitative social science and management research ([Hair, Risher, Sarstedt, & Ringle, 2019](#)).

#### 3.2 Population and Sampling

The target population consisted of all MSMEs in Pangkal Pinang City that actively use TikTok as a marketing platform for their businesses. Pangkal Pinang City was selected because it is the economic center of Bangka Belitung Province and has a growing MSME digital commerce ecosystem, making it an appropriate context for studying platform-based marketing capability. The exact population size was unknown; therefore, the Slovin formula was applied with a 10% margin of error, yielding a minimum sample requirement of 100 respondents. Purposive sampling was employed to ensure the relevance of the respondents. The inclusion criteria were that the business was an MSME (annual revenue below IDR 50 billion or employment below 300 persons, consistent with Indonesian MSME classification), the MSME was located in Pangkal Pinang City, and the MSME owner or manager actively used TikTok for product or service promotion. Questionnaires were distributed directly and via digital channels to eligible MSMEs, achieving a final valid sample of N= 100.

#### 3.3 Measurement Instruments

All constructs were measured using multi-item, five-point Likert scales (1 = strongly disagree to 5 = strongly agree). The operationalization of each variable is presented in Table 1. Audience segmentation ( $X_1$ ) was measured using six items covering demographic, geographic, psychographic, and behavioral segmentation dimensions, as well as content-audience alignment, adapted from [Kotler et al. \(2022\)](#) and [Khasanah \(2024\)](#). Content innovation ( $X_2$ ) was measured using five items reflecting content uniqueness, visual creativity, interactivity, trend alignment, and message clarity, adapted from [Rozaq et al. \(2025\)](#), as follows: TikTok marketing optimization ( $Y$ ) was measured using six items covering reach, engagement, follower growth, conversion, and brand awareness, adapted from [Appel et al. \(2020\)](#) and [Laraskana and Sakir \(2025\)](#).

Table 1. Operational definition of research variables

No.	Variables	Definition	Indicators	Instrument	Scale
1	Audience Segmentation	The MSME operator's effort to group and target TikTok audiences based on specific characteristics to ensure marketing messages are more precisely directed	Demographic, geographic, psychographic, behavioral segmentation; content-audience fit	Questionnaire	Likert
2	Content Innovation	The level of creativity and renewal of TikTok promotional content created by MSME operators to attract audience attention and increase interaction	Content uniqueness, visual creativity, interactivity, trend alignment, message clarity	Questionnaire	Likert
3	TikTok Marketing Optimization	The degree of success in utilizing TikTok as a digital marketing medium to	Reach, engagement, follower growth, conversion, brand awareness	Questionnaire	Likert

		achieve objectives	marketing			
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### 3.4 Analytical Procedures

Instrument quality was evaluated through validity testing (Pearson product-moment correlation; acceptance criterion:  $r\text{-count} > r\text{-table} = 0.165$  for  $n = 100$ ,  $df = 98$ ,  $\alpha = 0.05$ ) and reliability testing (Cronbach's alpha; acceptance criterion:  $\alpha > 0.70$ ) (Ghozali, 2018). Three classical assumption tests were performed prior to regression analysis: (1) normality of residuals, assessed using the Kolmogorov–Smirnov test with Monte Carlo simulation at  $\alpha = 0.10$  (acceptance criterion: Monte Carlo Sig.  $> 0.10$ ), following Okokon, Onyeagu, and Awopeju (2026); (2) multicollinearity, assessed via VIF and tolerance statistics (acceptance criterion:  $VIF < 10$ ,  $\text{tolerance} > 0.10$ ); and (3) heteroscedasticity, assessed via the Glejser test by regressing absolute residuals on the independent variables (acceptance criterion: all predictor p-values  $> 0.10$ ). Multiple linear regression analysis was conducted using IBM SPSS Statistics version 25. Partial hypotheses ( $H_1$  and  $H_2$ ) were evaluated via t-tests (significance level:  $\alpha = 0.10$ ), the simultaneous hypothesis ( $H_3$ ) via F-test, and model explanatory power via adjusted  $R^2$ .

## 4. Results and Discussion

### 4.1 Instrument Validity and Reliability

#### 4.1.1 Validity Test

Table 2 presents the results of the validity test. With  $r\text{-table} = 0.165$  ( $n = 100$ ,  $df = 98$ ,  $\alpha = 0.05$ ), all 17 items across the three constructs produced  $r\text{-count}$  values substantially exceeding this threshold (range: 0.365–0.934), confirming that all items validly measured their intended constructs. The relatively lower loading on item X1.6 ( $r = 0.365$ ) suggests that this item contributes the least discriminating information for audience segmentation, and future instrument refinement could consider rewording or replacing this item.

Table 2. Validity test results

Construct	Item	r-count	r-table	Valid?	Item	r-count	Valid?
Audience Segmentation	X <sub>1.1</sub>	0.818	0.165	✓	X1.4	0.869	✓
	X <sub>1.2</sub>	0.830	0.165	✓	X1.5	0.885	✓
	X <sub>1.3</sub>	0.901	0.165	✓	X1.6	0.365	✓
Content Innovation	X <sub>2.1</sub>	0.846	0.165	✓	X2.4	0.923	✓
	X <sub>2.2</sub>	0.925	0.165	✓	X2.5	0.885	✓
	X <sub>2.3</sub>	0.841	0.165	✓			
TikTok Mktg. Optimization	Y <sub>1</sub>	0.771	0.165	✓	Y4	0.880	✓
	Y <sub>2</sub>	0.808	0.165	✓	Y5	0.774	✓
	Y <sub>3</sub>	0.934	0.165	✓	Y6	0.594	✓

#### 4.1.2 Reliability Test

Table 3 confirms the reliability of all three constructs. Content innovation achieved the highest internal consistency ( $\alpha = 0.929$ ), indicating a highly coherent scale. TikTok marketing optimization ( $\alpha = 0.842$ ) and audience segmentation ( $\alpha = 0.861$ ) also demonstrated strong reliabilities. All values comfortably exceeded the conventional threshold of 0.70 (Ghozali, 2018), and all approached or exceeded 0.80, the threshold associated with 'good' reliability.

Table 3. Reliability test results

Variables	Items	Cronbach's Alpha	Result
Audience Segmentation	6	0.861	Reliable
Content Innovation	5	0.929	Reliable
TikTok Mktg. Optimization	6	0.842	Reliable

#### 4.2 Classical Assumption Tests

##### 4.2.1 Normality Test

As presented in Table 4, the Kolmogorov–Smirnov test yielded an Asymp. Sig. (2-tailed) of 0.003, which is below the conventional 0.05 threshold. However, as [Okokon et al. \(2026\)](#) demonstrate, the asymptotic significance of the KS test is sensitive to the sample size and tends to reject the normality null hypothesis even when departures from normality are trivial. The Monte Carlo simulation provided a more reliable significance estimate. The Monte Carlo Sig. (2-tailed) was 0.153, exceeding the adopted significance threshold of 0.10. Accordingly, the residuals were considered normally distributed, satisfying the normality assumption for linear regression.

Table 4. Normality test (Kolmogorov–Smirnov with Monte Carlo Simulation)

Test Statistic	Value	Result
KS Statistic	0.112	–
Asymp. Sig. (2-tailed)	0.003	–
Monte Carlo Sig. (2-tailed)	0.153	Normal (> 0.10)
99% CI [Lower; Upper]	[0.143; 0.162]	–

##### 4.2.2 Multicollinearity Test

Table 5 shows that both independent variables recorded identical tolerance values of 0.952 and VIF values of 1.050, indicating a minimal degree of inter-predictor correlations. These values were well within the acceptable bounds (tolerance > 0.10; VIF < 10), confirming the absence of problematic multicollinearity. The near-orthogonal relationship between audience segmentation and content innovation suggests that the two constructs capture genuinely distinct strategic capabilities, strengthening the interpretability of their individual regression coefficients.

Table 5. Multicollinearity test results

Variables	Tolerance	VIF
Audience Segmentation	0.952	1.050
Content Innovation	0.952	1.050

##### 4.2.3 Heteroscedasticity Test

Table 6 confirms that neither audience segmentation ( $p= 0.168$ ) nor content innovation ( $p= 0.749$ ) significantly predicts the absolute residuals, as both significance values exceed the threshold of 0.10. This indicates the absence of heteroscedasticity in the regression model, confirming that the error variance is homoscedastic across all levels of the predictors, a prerequisite for unbiased and efficient OLS regression coefficient estimation.

Table 6. Heteroscedasticity Test (Glejser Test on Residuals)

Model	B	Std. Error	Beta	t	Sig.
(Constant)	2.406	0.908	–	2.651	.009
Audience Segmentation	–0.045	0.032	–0.143	–1.389	.168
Content Innovation	0.009	0.029	0.033	0.321	.749

#### 4.3 Multiple Linear Regression Analysis

Table 7 presents the results of the multiple linear regression analysis. The estimated regression equation is as follows:

$$\hat{Y} = 1.451 + 0.159X_1 + 0.911X_2 \quad (1)$$

The constant ( $\alpha= 1.451$ ) indicates the predicted level of TikTok marketing optimization when both predictor variables equal zero, a theoretical baseline of limited practical relevance given the non-zero ranges of both predictors. The regression coefficient for audience segmentation ( $\beta_1= 0.159$ ) indicates that a one-unit improvement in audience segmentation is associated with a 0.159-unit increase in TikTok marketing optimization, while holding content innovation constant. The regression coefficient for content innovation ( $\beta_2= 0.911$ ) indicates a substantially larger effect: a one-unit improvement in content innovation is associated with a 0.911-unit increase in TikTok marketing optimization, holding audience segmentation constant. The magnitude difference between the two coefficients indicates that content innovation is the dominant driver of TikTok marketing performance in this sample.

Table 7. Multiple linear regression coefficients

Model	B	Std. Error	Beta ( $\beta$ )	t	Sig.	Decision
(Constant)	1.451	1.466	–	0.990	.325	–
Audience Segmentation	0.159	0.052	0.137	3.071	.003	$H_1$ Supported
Content Innovation	0.911	0.047	0.864	19.389	.000	$H_2$ Supported

#### 4.4 Simultaneous Test (F-test) and Coefficient of Determination

Table 8 confirms that the overall regression model is statistically significant ( $F= 216.042$ ,  $p < 0.001$ ), providing strong support for  $H_3$ . The F-statistic of 216.042 is one of the largest reported in the comparable digital marketing literature, reflecting the high explanatory power of the two-predictor model in this study's context.

Table 8. Simultaneous F-test (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1619.242	2	809.621	216.042	.000
Residual	363.508	97	3.748	–	–
Total	1982.750	99	–	–	–

Table 9 presents the coefficients of determination. The Adjusted  $R^2= 0.813$  indicates that audience segmentation and content innovation jointly explain 81.3% of the variance in TikTok marketing optimization, a remarkably high proportion that substantially exceeds the explanatory power reported in comparable studies (adj.  $R^2 \approx 0.45-0.60$ ). The remaining 18.7% of the variance was attributable to factors outside the model.

Table 9. Coefficient of determination

Model	R	R Square	Adjusted R Square
1	0.904	0.817	0.813

#### 4.5 Discussion

##### 4.5.1 Effect of Audience Segmentation on TikTok Marketing Optimization

The finding that audience segmentation significantly and positively predicts TikTok marketing optimization ( $\beta= 0.159$ ,  $t= 3.071$ ,  $p= 0.003$ ) supports  $H_1$  and is theoretically consistent with the STP framework [Kotler et al. \(2022\)](#) and the RBV's proposition that market intelligence capabilities generate competitive marketing advantage ([Barney, 1991](#)). MSME operators who systematically analyze TikTok audience demographics, behavioral patterns, geographic concentrations, and psychographic profiles are better positioned to make content, timing, and format decisions that align with the target segment's preferences, thereby achieving higher engagement rates, more efficient reach, and stronger brand-audience relationships.

This result corroborates [Dwivedi et al. \(2021\)](#), who established that audience-informed personalization improves digital marketing effectiveness, and [Putri et al. \(2024\)](#), who specifically demonstrated this relationship on TikTok in the Indonesian MSME context. [Vrontis et al. \(2021\)](#) further reported that segmentation-based personalization significantly enhances user engagement on social media platforms broadly. The relatively modest coefficient ( $\beta= 0.159$  unstandardized; standardized  $\beta= 0.137$ ) compared

to content innovation suggests that, while audience segmentation is a necessary and significant condition for marketing optimization, it primarily operates as an enabling capability that amplifies the effect of content innovation. Knowing the audience informs the content to create, but the quality and creativity of that content ultimately determine user response.

#### *4.5.2 Effect of Content Innovation on TikTok Marketing Optimization*

Content innovation emerged as the dominant predictor of TikTok marketing optimization ( $\beta= 0.911$ ,  $t= 19.389$ ,  $p < 0.001$ ; standardized  $\beta= 0.864$ ), strongly supporting  $H_2$  and aligning with TikTok's platform architecture. Unlike platforms that reward network effects (Facebook, Instagram) or search relevance (YouTube), TikTok's FYP algorithm prioritizes content quality signals, completion rate, engagement rate, and rewatch rate as the primary distribution determinants ([Zhang et al., 2017](#)). This platform logic makes creative capability a near-prerequisite for marketing success: high-quality, innovative content can achieve viral organic reach even from accounts with minimal follower bases, while low-quality content achieves little distribution, regardless of audience-targeting sophistication.

The magnitude of the content innovation coefficient (0.911) is notably large, consistent with [Akbari et al. \(2022\)](#), who demonstrated that creative, trend-integrated TikTok content substantially outperforms generic promotional material in generating brand awareness and user interactions. [Putra et al. \(2025\)](#) similarly found content innovation to be the strongest predictor of digital marketing effectiveness in their Indonesian sample. From a UGT perspective [Katz et al. \(1973\)](#) and [Adistri and Rusman \(2024\)](#), these results confirm that TikTok users select and engage with content primarily based on gratification value entertainment, information, or social connection and that innovative content is uniquely capable of delivering such gratifications. The practical implication for MSMEs is clear: investing in content creation capabilities, including video production skills, editing software, trend monitoring, and creative ideation processes, offers the highest marginal return for TikTok marketing optimization.

#### *4.5.3 Simultaneous Effects and Model Fit*

The simultaneous test ( $F= 216.042$ ,  $p < 0.001$ ) and the high adjusted  $R^2$  (0.813) confirm  $H_3$  and reveal that audience segmentation and content innovation together account for over four-fifths of the variance in TikTok marketing. This exceptionally high explanatory power suggests that the two constructs collectively capture the core strategic capabilities that distinguish high-from low-performing TikTok MSME marketers in Pangkal Pinang City. The results also imply that the RBV-informed theoretical framework underlying this study, which treats these capabilities as the primary value-creating resources in the TikTok marketing context, has strong empirical support.

The complementarity of these two capabilities is noteworthy. Audience segmentation without content innovation provides market knowledge but cannot translate it into an engaging platform experience. Content innovation without audience segmentation may produce creative content that fails to reach or resonate with the intended consumers. Together, the two capabilities form an integrated digital marketing competence that enables MSMEs to understand their target markets and communicate effectively within them, a finding with direct implications for MSME capacity-building programs and digital marketing training curricula in Indonesia.

## **5. Conclusions**

### **5.1 Conclusion**

This study investigates the influence of audience segmentation and content innovation on TikTok marketing optimization among MSMEs in Pangkal Pinang City, Indonesia. Grounded in the Resource-Based View, Uses and Gratification Theory, and the STP framework, and tested through multiple linear regression analysis of data from 100 purposively selected MSME respondents, three principal conclusions are drawn. First, audience segmentation had a significant positive effect on TikTok marketing optimization ( $H_1$  supported:  $\beta= 0.159$ ,  $t= 3.071$ ,  $p= 0.003$ ), confirming that the ability to analyze and target distinct TikTok user segments meaningfully improves marketing effectiveness. Second, content innovation has a significant positive effect on TikTok marketing optimization ( $H_2$  supported:  $\beta= 0.911$ ,  $t= 19.389$ ,  $p < 0.001$ ) and emerges as the dominant predictor, underscoring the primacy of creative content capability in an entertainment-first short video platform. Third, audience

segmentation and content innovation simultaneously and significantly predict TikTok marketing optimization ( $H_3$  supported:  $F= 216.042$ ,  $p < 0.001$ ;  $Adj. R^2= 0.813$ ), indicating that the two capabilities together explain 81.3% of the variance in marketing optimization, a remarkably high figure reflecting the strategic centrality of these two competencies for MSME TikTok marketing success. These findings extend the social media marketing literature by providing empirical evidence from an underrepresented regional Indonesian MSME context and demonstrating the robustness of the RBV–UGT–STP theoretical integration in explaining platform-specific marketing performance.

### **5.2 Research Limitations**

Several limitations qualify the scope and interpretation of this study's findings. First, the geographic restriction to Pangkal Pinang City limits the generalizability of the findings to MSMEs in other Indonesian cities or provinces with different economic conditions, digital infrastructure, and consumer demographics. Replication in other regional and urban contexts is needed to assess the boundary conditions of observed relationships. Second, the study included only two predictor variables, leaving 18.7% of the variance in TikTok marketing optimization unexplained. Potentially important factors, including influencer marketing engagement, digital capability (platform algorithm literacy), customer engagement quality, product quality signaling, social capital, and owner-manager digital self-efficacy, were not examined. Third, the cross-sectional design precludes causal inference; the regression estimates reflect associations but cannot rule out reverse causality (e.g., marketing success motivating greater investment in segmentation and content innovation) or omitted variable confounding. Fourth, reliance on self-reported Likert-scale data introduces potential common method bias and social desirability response tendencies, particularly for performance-related items (TikTok marketing optimization). Fifth, the relatively lower loading of item  $X_{1.6}$  in the audience segmentation scale ( $r= 0.365$ ) suggests suboptimal measurement of one segmentation dimension, which may have attenuated the estimated effect of audience segmentation.

### **5.3 Suggestions and Directions for Future Research**

Based on the findings and limitations identified above, several recommendations are proposed for future research and practical development. First, future studies should expand the research model by incorporating additional variables related to influencer collaboration intensity, the digital capability of MSME owners or managers, customer engagement depth, and platform-specific features available on TikTok, such as TikTok Live, Hashtag Challenges, and TikTok Shop integration. The inclusion of these variables may contribute to the development of a more comprehensive model for TikTok marketing optimization for MSMEs. Second, future research should consider conducting multicity or nationwide surveys to improve the generalizability of the findings across different regional contexts in Indonesia.

Comparative studies across countries may also provide deeper insights into how cultural, institutional, and economic factors influence the relationship between audience segmentation, content innovation, and marketing optimization. Third, longitudinal research designs or experimental approaches are recommended to provide stronger evidence regarding causal relationships and to evaluate whether improvements in audience segmentation and content innovation capabilities consistently lead to better marketing optimization outcomes. Fourth, future studies should examine the mediating role of content innovation in the relationship between audience segmentation and TikTok marketing optimization, as well as the moderating role of digital self-efficacy and platform algorithm literacy. Fifth, qualitative or mixed-methods approaches are suggested to gain a deeper understanding of content creation practices, audience analysis strategies and decision-making processes among successful MSME TikTok marketers. Finally, the instrument used to measure audience segmentation should be further refined and validated using a larger sample to improve measurement accuracy and address the weaker indicators identified in the current study.

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