

The Analysis Causal Model of Social Media Management Strategies on Organizational Performance of Small Listed Enterprises in China with Customer Engagement as a Mediator

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Abstract

In the context of the rapid development of social media in today's era, This paper primarily examines the impact of social media management strategies on organizational performance in small listed enterprises in China through the mediating role of customer engagement. The research employs a mixed-methods approach, combining quantitative and qualitative methods. First, in the quantitative research, data from 400 survey questionnaires were collected from 34 small listed enterprises across five regions in China (East China, South China, West China, and North China). The researchers used SPSS 26.0 and Amos 24.0 software to conduct reliability and validity analyses, which included data preprocessing, descriptive statistical analysis, reliability analysis, structural validity analysis, convergent validity analysis and correlation analysis, then constructed a Structural Equation Model (SEM). The hypothesis testing through the model revealed the following findings: 1) Social media management strategies have a positive indirect effect on organizational performance through customer engagement (0.946); 2) Customer engagement has a moderate direct effect on organizational performance (0.366); 3) Social media management strategies have a positive direct effect on organizational performance (0.649). Secondly, in the qualitative research, in-depth interviews were conducted with executives from 10 listed enterprises in five regions of China, and the interview results further validated the conclusions of the qualitative analysis. The findings provide new insights for small listed enterprises in China to enhance organizational performance and customer engagement, and offer new ideas for other enterprises to formulate social media management strategies in the future.

Keyword: Causal Model; Social Media; Customer Engagement; Organizational Performance; Small listed enterprises

Introduction

In China, social media platforms such as WeChat, QQ, and Weibo have become critical for consumers to access brand information, driven by a consistently growing user base (CNNIC, 2021). These platforms serve as essential channels for information dissemination and interaction. Enterprises are actively utilizing these platforms to shape their brand images, as seen in the widespread use of official accounts by companies like Xiaomi and Huawei. This engagement highlights the significance of social media in modern marketing strategies (WeChat Business Group, 2022; Jingxing Interactive, 2020; TikTok Private Domain Management White Paper, 2021).

Globally, social media—defined as internet-based tools for sharing user-generated content (Kaplan & Haenlein, 2010)—has experienced exponential growth since its inception. Platforms like Facebook, Twitter, and YouTube now boast billions of users, fundamentally changing how businesses engage with customers (Barker et al., 2016). This transformation has led organizations to harness social media as a marketing tool, with many Fortune 500 companies integrating it into their strategies (Tsitsi et al., 2013). Particularly in the B2C sector, social media marketing facilitates two-way communication and co-creation of value with consumers (Hsu, 2012; Weber, 2009). The interactivity and reach of the Internet have empowered consumers and prompted a shift in marketing strategies from traditional one-way messaging to customer-centric engagement (Fournier & Avery, 2011).

Social media has become a pivotal platform for enhancing organizational performance and customer engagement, particularly for small listed enterprises (SMEs) operating under resource constraints. This study explores the relationship between social media management strategies and customer engagement in SMEs, and how this relationship impacts organizational performance. The research addresses three key questions: 1) How do social media strategies influence customer engagement? 2) How do these strategies affect organizational performance? 3) How does customer engagement in turn impact performance? By examining these questions, the study aims to provide practical guidance and theoretical support for SMEs, enabling them to refine their strategic management and continuously improve performance. This research is crucial for managers seeking to optimize their social media strategies and enhance organizational effectiveness.

The research objectives of this paper are the following three objectives: 1). To study the impact of Social Media Management Strategies on Customer Engagement of Small listed Enterprises in China, whether it can indirectly impact Organizational Performance through Customer Engagement. 2). To study the impact of Customer Engagement on Organizational Performance. 3). To study the impact of Social Media Management Strategies on Organizational Performance.

Literature Review and Hypotheses

1. Social Media Management Strategies Theory

Social media has emerged as a powerful tool for marketing, communication, and collaboration within and beyond organizations. It is considered a new marketing channel (Hsu, 2012) that enables brands to shape relationships with customers (Kaplan and Haenlein, 2010). Companies are transforming from broadcasters to participants in customer conversations (Weber, 2009), driven by the Internet's capacity to amplify consumer voices (Fournier and Avery, 2011). Social media platforms like Facebook facilitate brand engagement and loyalty (Bagozzi and Dholakia, 2006). Additionally, social media management strategies encompass broader organizational goals than mere marketing, including resource management, innovation promotion, and competitive intelligence (Effing & Spil, 2016). Despite its widespread adoption, enterprises struggle with effective strategy implementation due to a lack of comprehensive frameworks (Fuchs, 2013). Successful strategies integrate with overall business objectives, tailor content to platform characteristics, emphasize engagement and customer service, and focus on brand image building (Tafesse & Wien, 2018). According to the comprehensive consideration of the reference research and the

author's research, three dimensions (Social Media Engagement, Content Strategy, Content Strategy) are selected as social media management strategies.

2. Customer Engagement Theory

The references provides a comprehensive overview of social media's strategic significance in modern business. It underscores social media's evolution from a marketing tool to a vital communication platform, fostering brand engagement and customer loyalty (Hsu, 2012). Drawing from the Resource-Based View (Wernerfelt, 1984), it argues that unique social media capabilities can confer competitive advantage, while the Dynamic Capability Theory posits its adaptability to dynamic market environments (Bharadwaj, 2000). The document emphasizes the importance of content strategy in creating engaging, useful, and audience-aligned content (Kohler, 2011) and discusses impression management strategies like ingratiation and self-promotion to cultivate positive organizational images (Rosenfeld, 1997). Additionally, it explores the concept of customer participation in enterprise innovation, facilitated by social media, which accelerates knowledge absorption, reduces information-sharing costs, and fosters brand communication (Zhang Jie, 2020; Liu Hailong, 2019). Collectively, the document highlights the multifaceted benefits of strategic social media utilization in enhancing brand reputation, customer relationships, and overall business performance. According to the comprehensive consideration of the reference research and the author's research, three dimensions (Information Provided, Interpersonal Interaction, User Innovation) are selected as Customer Engagement.

3. Organizational Performance Theory

The references high lights the strategic importance of social media in modern business, evolving from a marketing tool to a critical platform for customer engagement and brand loyalty (Hsu, 2012). It underscores the Resource-Based View's (Wernerfelt, 1984) application in explaining how unique social media capabilities confer competitive advantage and the Dynamic Capability Theory's (Bharadwaj, 2000) relevance in adapting to dynamic market environments. The review emphasizes the impact of engaging content strategies (Kohler, 2011) and impression management tactics (Rosenfeld, 1997) on fostering positive organizational images. Additionally, it discusses customer participation in enterprise innovation via social media, enhancing knowledge absorption, reducing information-sharing costs, and accelerating brand communication (Zhang Jie, 2020; Liu Hailong, 2019). Lastly, the literature underscores the multifaceted nature of organizational performance, incorporating financial, market, innovation, profit, and relationship dimensions for comprehensive evaluation (Chung, 2014). According to the comprehensive consideration of the reference research and the author's research, three dimensions (Market Performance, Customer Performance, Interior Performance) are selected as Organizational Performance.

Accordingly, this paper proposes the following hypothesis:

Hypothesis 1: Social Media Management Strategies have an indirect effect on Organizational Performance through Customer Engagement.

Hypothesis 2: Customer Engagement have a direct effect on Organizational Performance.

Hypothesis 3: Social Media Management Strategies have a direct effect on Organizational Performance.

Based on the above hypotheses, this study proposes the following research framework
Figure 1

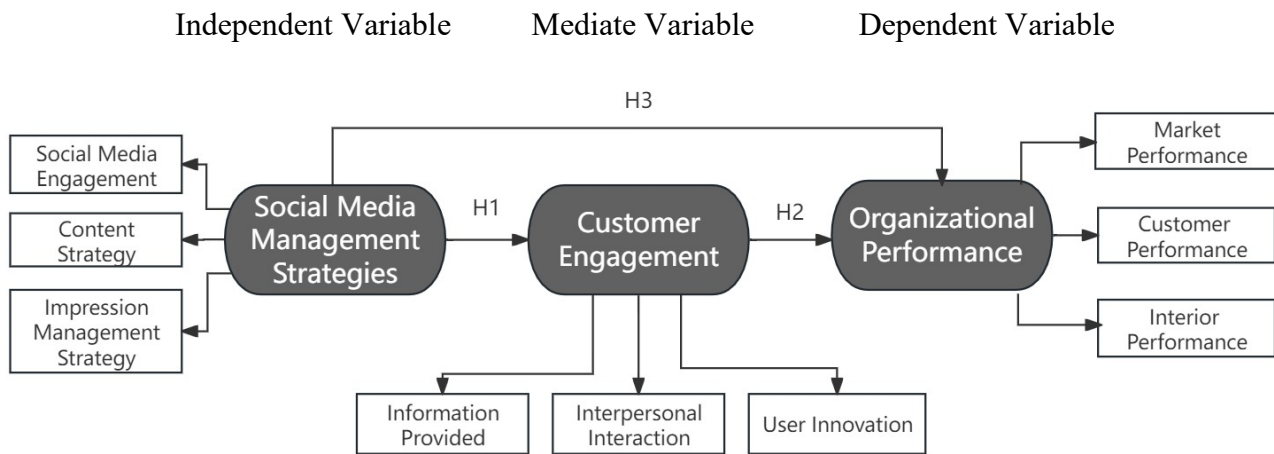


Figure 1 The Conceptual Framework

Research Methodology

1. Population and Sample

Research Population and Institutions: The survey is conducted nationwide in China, and these are China's small listed enterprises, which all entered the Asian top 200 in 2023, distributed in 12 provinces and 5 regions in China, with a total of 34 companies in operation. Among them, 15 are in East China, 11 in South China, 3 in Southwest and Northwest China, and 2 in North China. Central China is the central region of the 3. As shown in Table 3.1, there are 34 small listed enterprises in China, with a total number of employees of 94143. The sample size is sufficient and representative. Therefore, the Yamane Formula, $n = N / (1 + Ne^2)$, $e = 0.05$, was used to determine the confidence level and sampling error.

$$n = \frac{N}{1 + Ne^2} = \frac{94143}{1 + 94143 * 0.05^2} = 398.3$$

According to the formula, the minimum sample size of participants in the final survey was 398.3, so 400 employees were taken as the sample size. The questionnaires planned to be used in this study are more than 400 questionnaires. We classify the above table by five regions and by province.

In the end, the total sample was obtained from the company with the largest number of employees in these five provinces (Zhejiang, Guangdong, Sichuan, Beijing, and Hunan). As shown in Table 1.

Table 1 Population and specific sample using purposive sampling, classified by each small-listed enterprises (SLE) in East, South, West, North, Middle region, China.

Area	Province	Companies Name	employees	percentage	Questionnaires
East	Zhejiang	Zhejiang Jiuzhou Pharmaceutical Co., Ltd	4602	16%	64
South	Guangdong	Shenzhen Kstar Science and Technology Co., Ltd	3818	14%	56
West	Sichuan	Qianhe Condiment & Food Co., Ltd	2702	10%	40
North	Beijing	Thunder Software Technology Co., Ltd	13232	47%	188
Middle	Hunan	Yankershop Food Co., Ltd	3527	13%	52
Total	5	5	27881	100%	400

2. Data Collection

According to the research purpose, the research problem, the characteristics of the research object, etc, the researchers will collect data 2 types of data: quantitative data (400 questionnaires, 66 questionnaire questions) and qualitative data (10 interviews) as supplements.

(1) Quantitative data

For collecting data, the researchers will receive the questionnaire by email (E-mail) and send it to the human resources department of each company and distribute it to a designated sample group. After that, the HR department will collect them. The number of questionnaires determined by the researchers was forwarded only to a purposeful sample of employees under the general management department, where the data collected were a sample of companies belonging to China's listed Internet companies and distributed in the eastern, southern, western, northern and central regions of China. That is, the sample group, according to the number of specified samples, there are a total of 5 regions, and 400 questionnaires are collected in 5 regions. A total of 400 documents were processed and analyzed using computer programs. The statistic used in data analysis is frequency. Mean Percentage (Mean) and Standard Deviation (SD), analyze the relationship between factors that affect organizational efficiency, examine the assumptions, relationships, structure, and causal relationships of the model through Structural Equation Modeling (SEM), and estimate the path coefficient by using the Path analysis maximum likelihood (ML) using the following principles. To study the direct and indirect effects of a variable, and how it affects the dependent variable. It is an analysis of the causal pathways that affect the effectiveness of an organization.

(2) Qualitative data (Qualitative Research)

Along with observation, the researchers used the form of in-depth interviews. Understand the opinions of employees in the management positions of small listed enterprises who belong to the general management department. Chinese small listed enterprises were selected from a sample group of 5 regions: Eastern, Western, Southern, Northern, and Central, with 2 small listed enterprises in each region. Through a specific selection method, each enterprise has 1 person, a total of 2 people, 2 interviews, and the position is the enterprise's middle and senior managers, and the form of interviews is adopted, a total of 10 people. The format is flexible according to the convenience of the whistle-blower, with online interviews via e-mail and direct dialogue (face-to-face) with the whistle-blowers in the sample group. In-depth structured interviews will be used in this study. Informants need to provide in-depth information that can be analyzed using content analysis, complementing the quantitative data to provide clarity in the discussion in a more logical way in this study.

Research Result

1. Quantitative Analysis

1.1 Descriptive Statistical Analysis

Using SPSS 26.0, we quantified Social Media Management Strategies (SMMS), Customer Engagement (CE), and Organizational Performance (OP) through questionnaire responses, conducting descriptive statistical analysis on 66 questions across 9 dimensions. Coding included SMMS (SME, CS, IMS), CE (IP, II, UI), and OP (MP, CP, INP), each dimension reflecting specific strategies or performance aspects within the organization.

In the study, the basic information of 400 respondents, who are from Small listed enterprises in 5 areas (East China, South China, West China, North China, Central China) was collected and summarized in the following table (Table 2):

Table 2 Descriptive Statistical Analysis Table

Item	Category	Quantity	Percentage	Cumulative Percentage
Gender	Male	220	55%	55%
	Female	180	45%	100%
Age	20-29	120	30%	30%
	30-39	160	40%	70%
	40-49	80	20%	90%
	50+	40	10%	100%
Education Level	High School	40	10%	10%
	Bachelor's Degree	240	60%	70%
	Master's Degree	100	25%	95%
	PhD	20	5%	100%
Position in the Company	Manager	80	20%	20%
	Supervisor	120	30%	50%
	Employee	200	50%	100%

Years of Work	Less than 5	100	25%	25%
	5-10	160	40%	65%
	11-15	80	20%	85%
	More than 15	60	15%	100%
Annual Income	Less than 50,000	80	20%	20%
	50,000-100,000	200	50%	70%
	100,000-150,000	80	20%	90%
	More than 150,000	40	10%	100%

This table provides a descriptive statistical analysis of the sample of 400 small listed enterprises in China, including their gender, age, education level, position in the company, years of work, and annual income. Each category is presented with its quantity, percentage, and cumulative percentage. This table provides a useful summary of the demographic and employment characteristics of the sample of small listed enterprises in China, which can be used to inform the analysis of the effects of social media management strategies on organizational performance.

1.2 Reliability Analysis

In this study, SPSS 26.0 was used for reliability analysis of the data, and Cronbach's Alpha was used to describe the overall reliability analysis. In the output results, firstly check the overall Cronbach's Alpha, which is $0.969 > 0.7$ (Table 3), indicating that the overall consistency of the questionnaire is very high and the reliability is good. Secondly, the Cronbach's Alpha of each dimension are all greater than 0.7 (Table 4), indicating that the internal consistency of the questionnaire is very high and the data reliability is good.

Table 3 Overall Reliability Test

Cronbach's Alpha Based on Standardized Items	Cronbach's Alpha	N of Items
0.969	0.969	66

Table 4 Reliability Test in all Dimension

Dimension	Cronbach's Alpha	N of Items
SME	0.937	10
CS	0.935	9
IMS	0.937	9
IP	0.900	6
II	0.914	6
UI	0.904	6
MP	0.931	7

CP	0.904	7
INP	0.897	6
Item Total	0.969	66

1.3 Validity Analysis: Confirmatory Factor Analysis (CFA)

In this study, the software AMOS 24.0 is used to analyze Independent Variable Social Media Management Strategies (SMMS), Mediating Variable Customer Engagement (CE) and Dependent Variable Organizational Performance (OP) for confirmatory factor analysis(CFA), Three measurement models will be constructed, each consisting of one of the latent variables and their respective dimensions. In this section, structural validity analysis and convergent validity analysis were conducted for each variable respectively.

Social Media Management Strategies (SMMS)

1) Convergent Validity Analysis

In this study, AMOS 24.0 is used to establish a measurement model of Social Media management Strategies, and convergence validity in confirmatory factor analysis is used to test, and Social Media Engagement (SME), Content Strategies (CS), and social media management strategies (SME) are calculated. The AVE values of Impression Management Strategies (IMS) are 0.599, 0.615 and 0.621, respectively, which are all greater than 0.5. Similarly, the CR values of the above three dimensions are 0.937, 0.935, and 0.937 respectively, all of which are greater than 0.7, indicating that the data analyzed in this paper have good convergence validity.

2) Structural Validity Analysis (The fit of the model)

Through Structural Validity Analysis, the results of confirmatory factor analysis on "social media management strategies" show that the model composed of three dimensions of social media participation, content strategy and impression management strategy has a high degree of fit with the observed data. All the fitting indicators reached a good standard, which not only explained the rationality of the model structure, but also provided a solid statistical basis for the subsequent research on social media management strategies. Therefore, The study concluded that this model can effectively explain and predict the relevant phenomena of social media management strategies, and has high practical value, as shown in the table 5.

Table 5 Confirmatory factor analysis fitting index of social media management strategy

[illegible]

Within the framework of Structural equation modeling (SEM), the Structural Model and the Measurement Model are two interrelated but functionally different components. The relationship between them can be understood as two key steps in constructing and validating the core concepts and their interrelationships in a theoretical model. According to the results shown in Table , The three-dimensional measurement model of Social Media Management Strategies(SMMS) has a good fit to the data, They are Social Media Engagement (SME) 10 items, Content Strategies (CS) 9 items, Impression Management Strategies (IMS) 9 items, Specific confirmatory factor analysis of the model is shown in Figure 2 Measurement Model Of Social Media Management Strategies. All the fitting indicators have reached a good fitting level. This shows that the observational data well support the conceived model and the results of the exploratory study are verified.

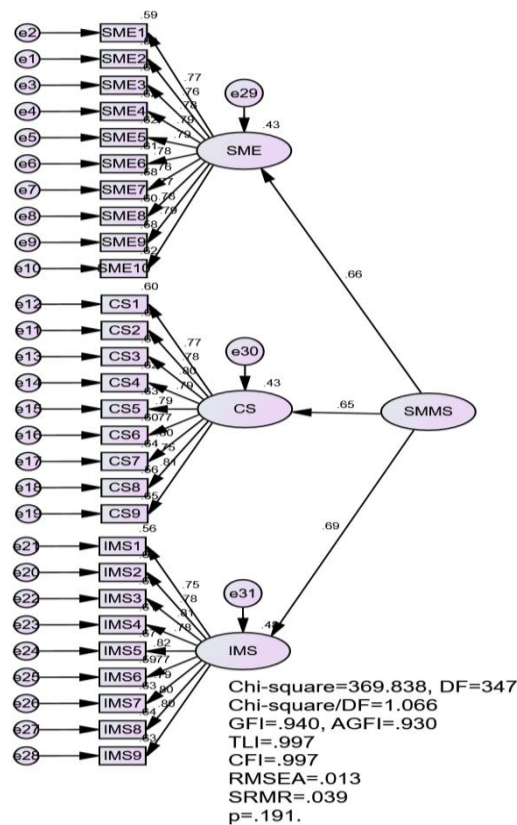


Figure 2 Measurement Model Of Social Media Management Strategies(SMMS)

Customer Engagement (CE)

1) Convergent Validity Analysis

In this study, AMOS 24.0 is used to establish a measurement model of Customer Engagement, and convergence validity in confirmatory factor analysis is used to test, and Information Provided (IP) , Interpersonal Interaction (II) and User Innovation (UI) are calculated. The AVE values of These 3 dimensions are 0.599, 0.640 and 0.610, respectively, which are all greater than 0.5. Similarly, the CR values of the above 3

dimensions are 0.899, 0.914, and 0.904 respectively, all of which are greater than 0.7, indicating that the data analyzed in this paper have good convergence validity.

2) Structural Validity Analysis (The fit of the model)

through the detailed analysis of the results of the confirmatory factor analysis of Customer Engagement, it can be concluded that the model not only has an excellent overall fit when describing Customer Engagement, but also shows a high degree of validity and reliability in all dimensions of measurement models. The specific index values, such as CMIN/DF, GFI, AGFI, TLI, CFI, RMSEA and SRMR, all reached or exceeded the recommended standards. The standard load factor, AVE and CR also verified the internal consistency and convergence validity of the measurement model. This conclusion provides strong support for in-depth understanding of the role of customer engagement in related fields (Table 5).

Table 5 Confirmatory factor analysis fitting index of Customer Engagement

Goodnes s of Fit Index	CMIN	DF	CMIN/D F	GFI	AGF I	TLI	CFI	RMSE A	SRM R
Test Result	137.99 3	13 2	1.045	0.964	0.953	0.998	0.999	0.011	0.040
Level of good fit			< 5	≥ 0.9 5	≥ 0.9	≥ 0.9 5	≥ 0.9 5	<0.08	<0.08
Result	All passed								

According to the results shown in Table , The measurement model of Customer Engagement (CE) has a good fit to the data, They are Customer Engagement (CE) 6 items, Interpersonal Interaction (II) 6 items, User Innovation (UI) 6 items, Specific confirmatory factor analysis of the model is shown in Figure 3 Measurement Model Of Customer Engagement. All the fitting indicators have reached a good fitting level. This shows that the observational data well support the conceived model and the results of the exploratory study are verified.

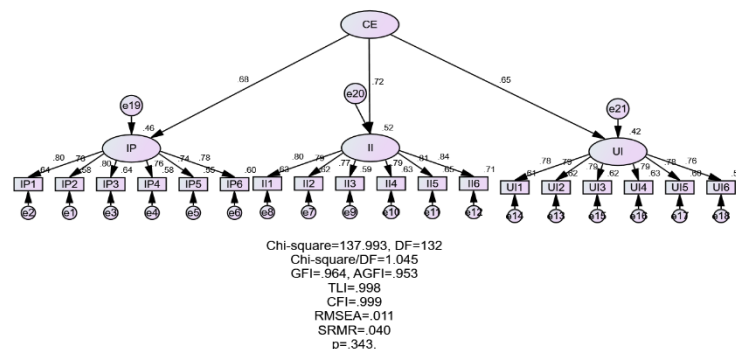


Figure 3 Measurement Model Of Customer Engagement (CE).

Organizational Performance (OP)

1) Convergent Validity Analysis

In this study, AMOS 24.0 is used to establish a measurement model of Customer Engagement, and convergence validity in confirmatory factor analysis is used to test, and Market Performance (MP), Customer Performance (CP) and Interior Performance (INP) are calculated. The AVE values of These 3 dimensions are 0.660, 0.573 and 0.593, respectively, which are all greater than 0.5. Similarly, the CR values of the above 3 dimensions are 0.931, 0.904, and 0.897 respectively, all of which are greater than 0.7, indicating that the data analyzed in this paper have good convergence validity.

2) Structural Validity Analysis (The fit of the model)

Based on the results of confirmatory factor analysis based on the measurement model of organizational performance established by AMOS, we evaluate three dimensions of organizational performance: market performance (MP), customer performance (CP) and performance dimension (INP). The Standard Load Factor of the market performance dimension indicates the close correlation between each measurement item and potential variables, such as GFI=0.963, AGFI=0.954, TLI=1.002, CFI=1.000, and their values are all greater than 0.95. RMSEA=0.001, SRMR=0.038, their values are less than 0.08, combining the good fitting indicators of all dimensions and the high standard of internal reliability, It can be concluded that when describing organizational performance, this confirmatory factor analysis model not only has strong internal consistency in each dimension, but also has excellent overall fit with the data, as shown in the Table 6.

Table 6 Confirmatory factor analysis fitting index of Organizational Performance

Goodnes s of Fit Index	CMIN	DF	CMIN/D F	GFI	AGF I	TLI	CFI	RMSE A	SRM R
Test Result	156.90 7	16 7	0.940	0.963	0.954	1.002	1.000	0.001	0.038
Level of good fit			< 5	≥ 0.9 5	≥ 0.9	≥ 0.9 5	≥ 0.9 5	<0.08	<0.08
Result	All passed								

According to the results shown in Table , The three-dimensional measurement model of Organizational Performance (OP) has a good fit to the data, They are Market Performance (MP) 7 items, Customer Performance (CP) 7 items, Interior Performance (INP) 6 items, Specific confirmatory factor analysis of the model is shown in Figure 4 Measurement Model Of Organizational Performance. All the fitting indicators have reached a good fitting level. This shows that the observational data well support the conceived model and the results of the exploratory study are verified.

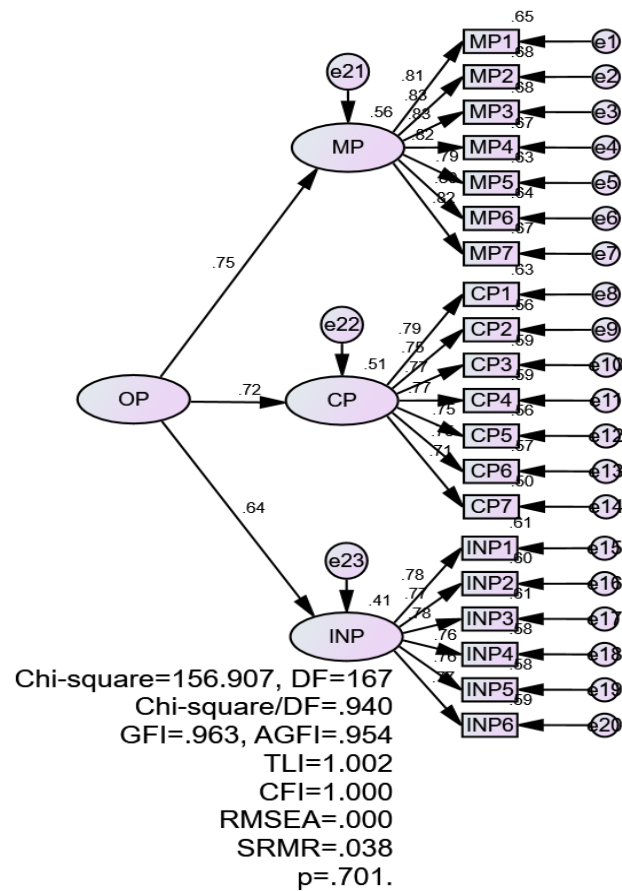


Figure 4 Measurement Model Of Organizational Performance (OP).

1.4 Correlation Analysis

In this study, the dimensions of each variable are analyzed by correlation analysis, which usually quantifies the strength and direction of the relationship between variables by calculating correlation coefficients. The most commonly used correlation coefficient is Pearson's correlation coefficient, which measures the strength and direction of the linear relationship between two variables. The values of the correlation coefficients range from -1 to 1, where 1 indicates a completely positive correlation, -1 indicates a completely negative correlation, and 0 indicates no linear correlation. This is shown in the following table 7

Table 7 Result of The correlation degree and the control table

value	observed result	indicate
$-1 < r < 0$	Non	Negatively correlated
$r=0$	Non	Not related.
$0 < r < 1$	0.215-0.418	Positively correlated

In this study, SPSS 26.0 software was used to analyze the correlation of the 9 dimensions of the three variables. The specific results are shown in Table 8 Results of Pearson's Correlation Analysis for each dimension. The results show that the value of the correlation coefficient of the 9 dimensions was distributed between 0.215 and 0.418. This indicates a positive relationship between the variables ($p < 0.01$), and these significant results provide pre-test support for the hypothesis test in this paper.

Table 8 Results of Pearson's Correlation Analysis For Each Dimension

	1	2	3	4	5	6	7	8	9
SM E	1								
CS	.314**	1							
IMS	.300**	.356**	1						
IP	.238**	.282**	.328**	1					
II	.330**	.318**	.330**	.340**	1				
UI	.310**	.293**	.213**	.215**	.296**	1			
MP	.338**	.418**	.355**	.282**	.336**	.267**	1		
CP	.281**	.294**	.250**	.261**	.258**	.233**	.353**	1	
INP	.233**	.301**	.219**	.264**	.302**	.343**	.236**	.258**	1
* P-value<0.05 ** P-value<0.01									

SEM Fitting and Hypothesis Testing

SEM Fitting

Structural equation model (SEM) is generally composed of **Measurement Model** and **Structure Model**. On the basis of the established measurement model, this study also established a structural model, which is as follows:

In order to verify the impact of Social Media Management Strategies (SMMS) on Organizational Performance (OP) through the mediating role of customer participation, AMOS 24.0 was used for model fitting analysis. The relationship between variables is explained through structural equation modeling, and the fitness judgment results of the model are obtained in Table 9. The fitting indexes of the structural equation model all show good fitting effect. Specific indicators are as follows: A P value of 0.116 (greater than 0.05) indicates that the difference between the model and the data is not significant; CMIN (Chi-square value) was 32.471, DF (degrees of freedom) was 24, and CMIN/DF ratio was 1.353 (less than 5), indicating a good fit of the model. GFI (Goodness of Fit index), AGFI (adjusted goodness of Fit index), TLI (Tuck-Lewis index) and CFI (Comparative fit index) are all greater than 0.95, indicating a high degree of consistency between the model and the data. The RMSEA (approximate root mean square error) is 0.029 (less than 0.08), and the SRMR (normalized residual root mean square error) is 0.041 (less than 0.08), further confirming the good fit of the model. In summary, the structural equation model has passed the test of all fitting indexes, and the overall fitting effect is very satisfactory.

Table 9 Results of SEM Model Fitness Judgment

Goodness of Fit Index	P - value	CMIN	DF	CMIN/DF	GFI	AGFI	TLI	CFI	RMSEA	SRMR
Test Result	0.116	32.471	24	1.353	0.983	0.968	0.981	0.987	0.029	0.041
Level of good fit	>0.05			< 5	≥ 0.95	≥ 0.9	≥ 0.95	≥ 0.95	<0.08	<0.08
Result	All passed									

Due to the sufficient preparatory work, the reading of a large number of literatures, the detailed research on the internalization selection of latent variables and the setting of observed variables, and the reliability and validity of data collection, the suitability of the model was extremely good when building the structural equation model, and there was almost no need to revise the model. The Causal Model is shown in Figure 5 below.

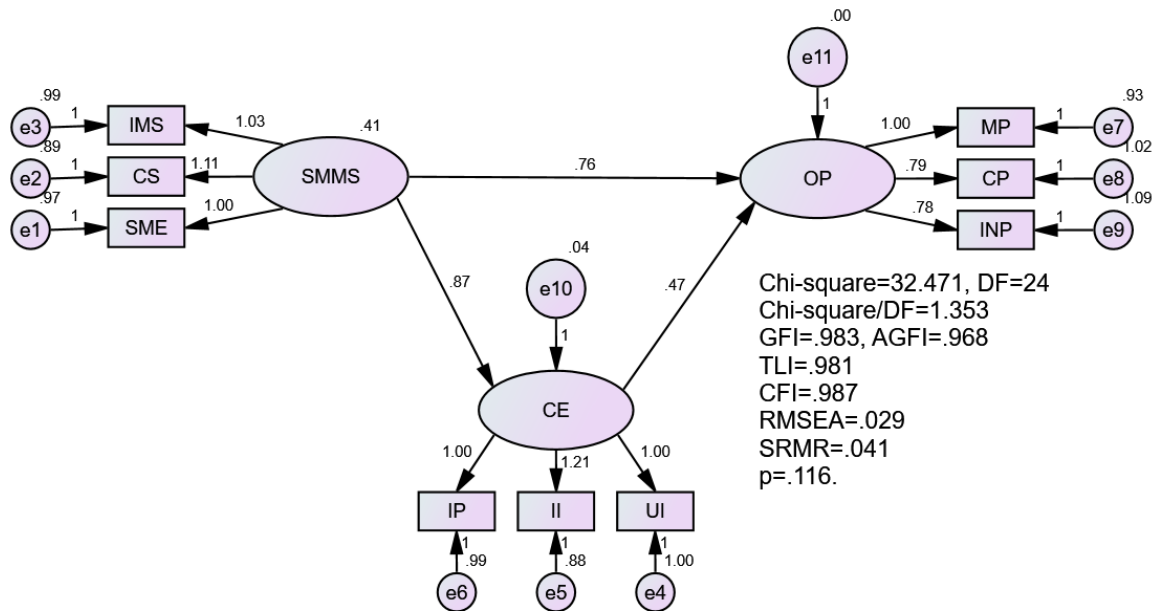


Figure 5 The Final Structural Equation Model of Non-standardized Coefficients(Causal Model)

Hypothesis Testing

Based on the structural equation model and data analysis, The three hypotheses proposed in the study have been verified: 1) Social Media Management Strategies have Positive indirect effect on Organizational Performance through Customer Engagement. 2) Customer Engagement have Medium direct effect on Organizational Performance. 3) Social Media Management Strategies have Positive direct effect on Organizational Performance(Table 10).

Table 10 Hypotheses Testing Results

No.	Hypotheses	Results	relationship
H1	Social Media Management Strategies have an indirect effect on Organizational Performance through Customer Engagement.	Accepted	Positive indirect impact
H2	Customer Engagement have a direct effect on Organizational Performance	Accepted	Medium direct impact
H3	Social Media Management Strategies have a direct effect on Organizational Performance.	Accepted	Positive direct impact

4.2 Qualitative Analysis

4.2.1 In-Depth Interviews

This study selected 10 small listed enterprises in Zhejiang, Guangdong, Sichuan, Beijing and Hunan provinces from East, South, West, North and Central China, and conducted in-depth interviews with a total of 10 personnel of these 10 enterprises, all of whom were managers or department chief of the enterprises.5 men, 5 women, aged between 40-58 years, All the interviewees have rich experience in enterprises management. Respondents were numbered in this study to facilitate the analysis of the relevant content (Table 11).

Table 11 The interview of specialist list

Area	Province	Respondent position	Specialist
East	Zhejiang	Manager	Executive No.1
		Section chief	Executive No.2
South	Guangdong	Manager	Executive No.3
		Section chief	Executive No.4
West	Sichuan	Manager	Executive No.5
		Section chief	Executive No.6
North	Beijing	Manager	Executive No.7
		Section chief	Executive No.8
Middle	Hunan	Manager	Executive No.9
		Section chief	Executive No.10
Total		10	10

4.2.2 Content Analysis

Through in-depth interviews with senior executives at 10 small public companies, we explore how social media management strategies affect organizational performance through customer engagement. the purpose of the interviews was explained to the interviewees before the interviews, how the collected data would be used, and confidentiality. The interview process of this research is as follows: first, the situation of Small Listed Enterprises is introduced, then the enterprise social media management strategy and customer participation are introduced, and finally the organizational performance is discussed.

The interview results clearly show that social media management strategies play a crucial role in promoting customer engagement, which in turn has a significant positive impact on organizational performance.

In summary, Based on the results of qualitative and quantitative research, I built a new causal model, which I call the "SCO model ". It provides a new reference for other enterprises in China or in the world to use social media management strategies to improve Organizational Performance.

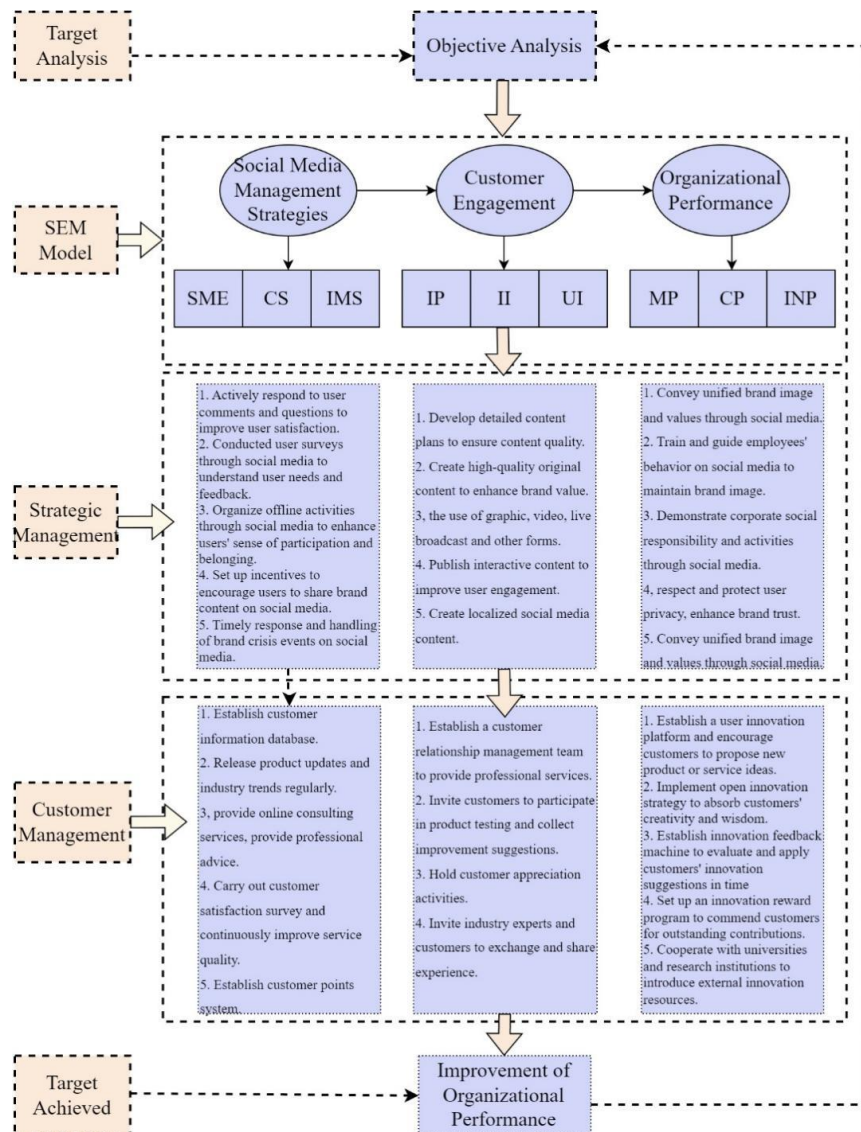


Figure 6 The Causal Model of Social Media Management Strategies Affecting to Organizational Performance (SCO model).

Research Conclusion

1. Research Conclusion

This paper aims to study the influencing mechanism and path between social media management strategies and organizational performance of small listed enterprises in China, and clarify the mediating function of Customer Engagement. The research adopts a mixed research method combining quantitative and qualitative methods. In the quantitative research, SPSS 26.0 and Amos 24.0 software are used to collect 400 questionnaire data, and descriptive statistical analysis, scale reliability analysis and validity analysis are carried out, including exploratory factor analysis and confirmatory factor analysis (Include: structural validity analysis, convergence validity analysis and correlation analysis). Final findings: 1) Social

Media Management Strategies have Positive indirect effect on Organizational Performance through Customer Engagement. 2) Customer Engagement have Medium direct effect on Organizational Performance. 3) Social Media Management Strategies have Positive direct effect on Organizational Performance. Secondly, the research hypothesis and conclusion are verified through the qualitative research of in-depth interview.

2. Discussion

Our study addresses three key research questions concerning the influence of social media management strategies on customer engagement and organizational performance. The findings reveal that effective social media strategies significantly enhance customer engagement by fostering high-quality content, active feedback response, and interactive events, thereby increasing customer stickiness and loyalty. This heightened engagement, in turn, drives organizational performance by optimizing products and services, bolstering brand image, and enhancing market competitiveness.

Further analysis indicates that social media management strategies not only directly impact organizational performance by facilitating rapid information dissemination and customer feedback collection but also indirectly through the mediating role of customer engagement. High levels of customer activity and interaction strengthen brand-customer connections, fostering loyalty and driving overall performance. Effective social media management thus encourages active customer participation and user-generated content, further elevating organizational performance.

Customer engagement significantly enhances organizational performance by increasing brand awareness, attracting new customer groups, and improving product offerings through feedback. This active participation not only boosts customer satisfaction and loyalty but also drives internal process optimization and innovation. However, managing customer engagement requires continuous investment in positive customer experiences and robust crisis management. Despite these challenges, digital transformation offers unprecedented opportunities for meeting personalized needs, strengthening brand loyalty, and gaining competitive advantages.

Organizational performance is influenced by external factors (market changes, technology, policies), internal management, employee engagement, and strategic choices. Enhancing performance requires a scientific evaluation system with clear indicators, regular reviews, and employee feedback. Encouraging innovation, strengthening teamwork, and optimizing resources are also crucial. Additionally, organizational performance mediates the impact of customer engagement and social media strategies on market competitiveness.

In summary, our research underscores the importance of effective social media management strategies in driving customer engagement and organizational performance, providing valuable insights for enterprises in formulating and optimizing their strategies.

Limitations and Future Directions

1. Limitations

This study's findings may be constrained by the sample size, which might not be representative of all small listed companies in China, possibly biasing results and limiting their generalizability. Additionally, the sample's uneven industry distribution could impact conclusion reliability due to varying social media strategies and performance across sectors. Data collection, relying heavily on questionnaires and interviews, introduces subjectivity, with respondents' interpretations potentially skewing answers. Data accuracy and reliability may also be affected by factors like respondent cooperation and seriousness. Furthermore, the study's causal model, based on assumptions, may not reflect all enterprise realities, and variable selection may not be exhaustive, overlooking factors like the macroeconomic environment and industry competition.

2. Future Directions

1) Expand the sample size and industry coverage: Future studies may consider expanding the sample size and increasing the diversity and representativeness of research samples to verify the universality and robustness of the model. It covers enterprises in more industries and explores the differences and commonalities in social media management strategies, customer engagement and organizational performance in different industries. 2) Deepen the understanding of intermediary mechanism and regulatory mechanism: Further study the specific intermediary mechanism between customer participation in social media management strategies and organizational performance, such as information sharing, emotional resonance, community belonging, etc. To explore the moderating variables that may affect the results of the model, such as corporate culture, leadership style, organization size, etc., in order to reveal the applicability of the model in different contexts.

References

- Chung, K. C., Chen, C. H., Tsai, H. H., & Chuang, Y. H. (2021). Social media privacy management strategies: A SEM analysis of user privacy behaviors. *Computer Communications*, 174, 122-130. doi:10.1016/j.comcom.2021.04.012
- Cottrill, C., Gault, P., Yeboah, G., Nelson, J. D., Anable, J., & Budd, T. (2017). Tweeting Transit: An examination of social media strategies for transport information management during a large event. *Transportation Research Part C-Emerging Technologies*, 77, 421-432. doi:10.1016/j.trc.2017.02.008
- Dogan-Sudas, H., Kara, A., Cabuk, S., & Kaya, K. (2022). Social Media Customer Relationship Management and Business Performance: Empirical Evidence from an Emerging Market. *Studies in Business and Economics*, 17 (2), 90-107. doi:10.2478/sbe-2022-0027
- Elena, C. A. (2016). Social Media – A Strategy in Developing Customer Relationship Management. *Procedia Economics and Finance*, 39, 785-790. doi:10.1016/s2212-5671(16)30266-0
- Fitriani, N., Setiawan, D., Aryani, Y. A., & Arifin, T. (2023). Does social media affect performance in e-commerce business? The role of customer management. *Journal of Open Innovation: Technology, Market, and Complexity*, 9 (4). doi:10.1016/j.joitmc.2023.100171

- Fu Yanfei. (2023). The effect of social media use on employee Job performance: The mediating role of job engagement and job burnout. (*Master*), Retrieved from <https://link.cnki.net/doi/10.27441/d.cnki.gyzdu.2023.002030> Available from Cnki
- Kulikovskaja, V., Hubert, M., Grunert, K. G., & Zhao, H. (2023). Driving marketing outcomes through social media-based customer engagement. *Journal of Retailing and Consumer Services*, 74. doi:10.1016/j.jretconser.2023.103445
- Lau, W. W. F. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. *Computers in Human Behavior*, 68, 286-291. doi:10.1016/j.chb.2016.11.043
- Lei, S. S. I., Pratt, S., & Wang, D. (2016). Factors influencing customer engagement with branded content in the social network sites of integrated resorts. *Asia Pacific Journal of Tourism Research*, 22(3), 316-328. doi:10.1080/10941665.2016.1250792
- Liu Jingyan, & Liu Xingyan. (2022). Study on the influence of customer engagement on service innovation performance of tourism e-commerce platform -- mediated by knowledge transfer. *Statistical theory and practice*. (02), 57-64.
- Liu, Z., Geng, R., Tse, Y. K., & Han, S. (2023). Mapping the relationship between social media usage and organizational performance: A meta-analysis. *Technological Forecasting and Social Change*, 187. doi:10.1016/j.techfore.2022.122253
- Martín-Rojas, R., Garrido-Moreno, A., & García-Morales, V. J. (2023). Social media use, corporate entrepreneurship and organizational resilience: A recipe for SMEs success in a post-Covid scenario. *Technological Forecasting and Social Change*, 190. doi:10.1016/j.techfore.2023.122421
- Meidute-Kavaliauskiene, I., Davidaviciene, V., Karakaya, G., & Ghorbani, S. (2021). The Measurement of Organizational Social Media Integration Impact on Financial and Innovative Performance: An Integrated Model. *Sustainability*, 13(18). doi:ARTN 1039710.3390/su131810397
- Ndung'u, J., Vertinsky, I., & Onyango, J. (2023). The relationship between social media use, social media types, and job performance amongst faculty in Kenya private universities. *Heliyon*. doi:10.1016/j.heliyon.2023.e22946
- Park, Y. E. (2022). Developing a COVID-19 Crisis Management Strategy Using News Media and Social Media in Big Data Analytics. *Social Science Computer Review*, 40(6), 1358-1375. doi:Artn 0894439321100731410.1177/08944393211007314
- Parveen, F., Jaafar, N. I., & Ainin, S. (2016). Social media's impact on organizational performance and entrepreneurial orientation in organizations. *Management Decision*, 54(9), 2208-2234. doi:10.1108/md-08-2015-0336
- Qalati, S. A. (2021). Research on the factors influencing the adoption of social media by smes in developing countries and its impact on their performance. (*Doctor*), Retrieved from <https://link.cnki.net/doi/10.27170/d.cnki.gjsuu.2021.001113> Available from Cnki
- Shah, S. A., Shoukat, M. H., Ahmad, M. S., & Khan, B. (2021). Role of social media technologies and customer relationship management capabilities 2.0 in creating customer loyalty and university reputation. *Journal of Marketing for Higher Education*, 1-24. doi:10.1080/08841241.2021.1991072

- Shi Fangfang. (2020). The influence of customer participation on service innovation performance in human resource service industry: the mediating role of employee innovation behavior and the moderating role of organizational innovation climate. *Western Economic Management Forum*. 31 (03), 36-48.
- Willis, E. A., Szabo-Reed, A. N., Ptomey, L. T., Steger, F. L., Honas, J. J., Al-Hihi, E. M., . . . Donnelly, J. E. (2016). Distance learning strategies for weight management utilizing social media: A comparison of phone conference call versus social media platform. Rationale and design for a randomized study. *Contemporary Clinical Trials*, 47, 282-288. doi:10.1016/j.cct.2016.02.005
- Xu, Y., Chen, W., & Ow, T. T. (2023). The effects of social media posts' characteristics on customer engagement: Evidence from WeChat. *Information & Management*, 60 (7). doi:10.1016/j.im.2023.103854
- Zhang Jie, & Cai Hong. (2020). The effects of customer engagement on new product development performance in virtual communities: the moderating role of virtual social capital. *Scientific and technological progress and countermeasures* , 37 (07), 16-25.