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Causal factors of nano marketing strategy affecting the consumer repurchase behavior in cosmetic business

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Abstract: The cosmetics industry is one that manufactures and sells cosmetic products, with efforts to expand brand recognition and production through influencers on social media. The heavy promotion of these products on social media accounts has made influencers an important marketing platform for cosmetic brands. However, brands must invest time and effort in finding the right influencers for their campaigns. Marketing mistakes made by influencers can result in unnecessary costs, difficulty in measuring outcomes, or pose high risks for the brand. The objectives of this research study were: 1) to study the causal factors affecting nano-marketing strategy and consumer repurchase behavior in the cosmetic business, 2) to study the influence of causal factors of nano-marketing strategy affecting consumer repurchase behavior in the cosmetic business, and 3) to develop a model of the causal factors of nano-marketing strategy affecting consumer repurchase behavior in the cosmetic business. A researcher collected data from interviews and online questionnaires with the cosmetic business, from July 2024 to September 2024, by collecting a sample of 560 people. The results of the analysis concluded that the microenvironment affected the nano-marketing strategy, the microenvironment affected consumer repurchase behavior through the nano-marketing strategy, community influencers affected the nano-marketing strategy, community influencers affected consumer repurchase behavior through the nano-marketing strategy, social media networking affected the nano-marketing strategy, social media networking affected consumer repurchase behavior through the nano-marketing strategy, and the nano-marketing strategy affected consumer repurchase behavior. The cosmetics business can develop plans in terms of the microenvironment, influencers within specific groups, and social media networking, allowing the cosmetics business to identify the nano-marketing strategy and consumer repurchase behavior. This approach also enables the business to respond to its own needs and implement processes for making purchasing decisions.

Keywords: *Community influencer, Consumer repurchase behavior, Micro environment, Nano-marketing strategy, Social media networking.*

1. Introduction

The cosmetics industry is a sector that manufactures and distributes cosmetic products. Currently, the global cosmetics and fragrance industry generates approximately $170 billion in annual revenue Heddebaut [1] with Europe being the leading market, valued at around €63 billion. Significant efforts have been made to develop and expand branding and local production to establish Thai cosmetic and skincare products in other markets. New brands for these products have emerged from current trends, particularly driven by influencers on social media. The heavy promotion of these products on social media accounts has turned influencers into a crucial marketing platform for cosmetic brands. This has led the researcher to study the application of nano-marketing strategy to analyze consumer repurchase

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behavior in the cosmetics business. Regarding research on nano-marketing strategy affecting consumer repurchase behavior, studies have been conducted by Gundová and Cvoligová [2]; Harshitha, et al. [3]; Vidani and Das [4]; Trziszka [5]; Arzhanova, et al. [6] and Bhalani, et al. [7].

The researcher collected data from the cosmetics business, categorizing the industry into four segments: Hair Care, Body Care, Face Care, and Makeup. Data was gathered through interviews and online questionnaires from cosmetic businesses between July 2024 and September 2024. The qualitative population consisted of cosmetic businesses, with a sample of four cases based on the different business categories. The quantitative population also consisted of cosmetic businesses, with a sample size of 560 cases, determined using statistical modeling techniques based on structural equation modeling (SEM).

This research is expected to provide valuable insights for cosmetic business entrepreneurs, helping them develop further research and enhance their cosmetic management systems. The findings could also contribute to advancing nano-marketing strategy and influencing consumer repurchase behavior in the cosmetics industry.

This study integrates systems theory to develop and examine empirical variables that influence nano-marketing strategy and consumer repurchase behavior. The researcher believes that the results will be highly beneficial to the cosmetics business sector as well as to the academic community, including scholars, researchers, and students. The empirical findings from this study can be further integrated and extended for future academic research.

2. Research Objective

1) To study the causal factors affecting nano-marketing strategy and consumer repurchase behavior in the cosmetics business.

2) To examine the influence of the causal factors of nano-marketing strategy on consumer repurchase behavior in the cosmetics business.

3) To develop a model of the causal factors of nano-marketing strategy affecting consumer repurchase behavior in the cosmetics business.

3. Literature Review

The concepts and theories used in this research encompass micro environment, influencers within peer groups, social media networking, nano-marketing strategy, and consumer repurchase behavior. These factors, as discussed in the background and significance of the study, serve as variables for establishing the research framework. The relationships between these variables are considered as follows:

Hypothesis 1: The Relationship between Micro Environment and Nano-Marketing Strategy

Harshitha, et al. [3] analyzed the impact of the micro environment on business-to-business marketing through community influencer. The study emphasized how companies utilize community influencer to facilitate business transactions and product sales.

Chatterjee, et al. [8] examined the role of micro environment factors in shaping marketing performance, focusing on dynamic international marketing capabilities. The study highlighted the role of leadership in optimizing nano-marketing strategy.

Gerlich, et al. [9] explored the integration of AI in marketing and demonstrated how social media networking influences public opinion, ultimately driving sales and enhancing nano-marketing strategy.

Hypothesis 2: The Relationship between Micro Environment and Consumer Repurchase Behavior Through Nano-Marketing Strategy

Taherian, et al. [10] discussed how the micro environment shapes consumer engagement through technological innovations such as smart grids, enhancing customer participation.

Wen, et al. [11] emphasized the significance of in-store surveillance and AI in recognizing customer behavior, adapting marketing efforts to align with consumer repurchase behavior.

Hu, et al. [12] explored the attributes of community influencer, such as credibility and entertainment value, which directly affect consumer trust and encourage consumer repurchase behavior.

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Hypothesis 3: The Relationship between Community Influencer and Nano-Marketing Strategy

Doshi, et al. [13] highlighted the role of community influencer in social media networking, demonstrating how peer recommendations drive engagement in nano-marketing strategy.

Wang, et al. [14] reviewed the effectiveness of community influencer in shaping consumer behavior, emphasizing their role in personalized and trust-based nano-marketing strategy.

Wibawa, et al. [15] explained how digital marketing enables community influencer to innovate and create authentic connections, enhancing nano-marketing strategy.

Hypothesis 4: The Relationship between Community Influencer and Consumer Repurchase Behavior Through Nano-Marketing Strategy

Piriyakul and Piriyakul [16] observed that the COVID-19 pandemic accelerated the shift to online purchases, with community influencer playing a crucial role in sustaining consumer repurchase behavior through digital platforms.

Walzhofer, et al. [17] discussed how traditional marketing approaches are limited in effectiveness, while nano-marketing strategy facilitated by community influencer help establish trust and loyalty, leading to higher consumer repurchase behavior.

Gerlich, et al. [9] emphasized AI-driven personalization and their impacts on marketing interactions, reinforcing the influence of community influencer on consumer repurchase behavior.

Hypothesis 5: The Relationship between Social Media Networking and Nano-Marketing Strategy

Khan and Ali [18] discussed how social media networking has evolved since the launch of PayPerPost, shaping modern nano-marketing strategy.

Le and Aydin [19] examined the challenges of social media networking, including authenticity concerns and market saturation, affecting the effectiveness of nano-marketing strategy.

Nair and Subramaniam [20] emphasized the rise of social media networking as a dominant force in nano-marketing strategy, enabling brands to build stronger consumer relationships.

Hypothesis 6: The Relationship between Social Media Networking and Consumer Repurchase Behavior Through Nano-Marketing Strategy

Kumar, et al. [21] highlighted how businesses leverage social media networking to enhance customer engagement and increase consumer repurchase behavior.

Mathew, et al. [22] explored the societal impact of social media networking, showing how it has transformed consumer decision-making and purchasing habits.

Murshed and De Castro [23] developed analytical tools to examine consumer repurchase behavior on social media networking platforms, revealing the effectiveness of nano-marketing strategy.

Hypothesis 7: The Relationship between Nano-Marketing Strategy and Consumer Repurchase Behavior

Inah, et al. [24] stated that nano-marketing strategy, driven by community influencer, are essential for business growth, particularly through social media networking.

Wilis and Faik [25] examined how nano-marketing strategy, digital marketing, and online reviews collectively shape consumer repurchase behavior.

Konoplyannikova, et al. [26] explored the development of nano-marketing strategy and their impact on brand perception, trust, and long-term consumer repurchase behavior.

4. Research Framework

This research employs both qualitative and quantitative approaches, based on systems theory. The research framework consists of four key components: (1) Input, (2) Process, (3) Output, and (4) Feedback. These components are explained as follows:

(1) Input refers to the Micro Environment, Community Influencer, and Social Media Networking: Micro Environment consists of six elements (Competitors, Suppliers, Employees, Beneficiaries, Media, Customers); Community influencer include six aspects (Level of Trust, Level of Loyalty, Range of Followers, Level of Influence, Brand Relevance, Degree of Volume); Social Media Networking

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comprises five key components (Network Sites, Social News Websites, Blogs, Content Communities, Commerce Communities)

(2) Process: the Nano-Marketing Strategy serves as the process and consists of six components (Tight Market Segment, Positioning, Niche Product, Pricing, Physical Distribution, and Social Media Promotion)

(3) Output refers to Consumer Repurchase Behavior, which includes five dimensions ((Perceived Value, Referral Behavior, Word of Mouth, Emotional Connection, and Brand Loyalty)

(4) Feedback represents the impact of Consumer Repurchase Behavior on the Micro Environment, Community Influencer, and Social Media Networking.

All four components are interconnected and indispensable. Any changes in one component will directly affect the others. Deficiencies or errors in one component will consequently impact the entire system. The details are as follows:

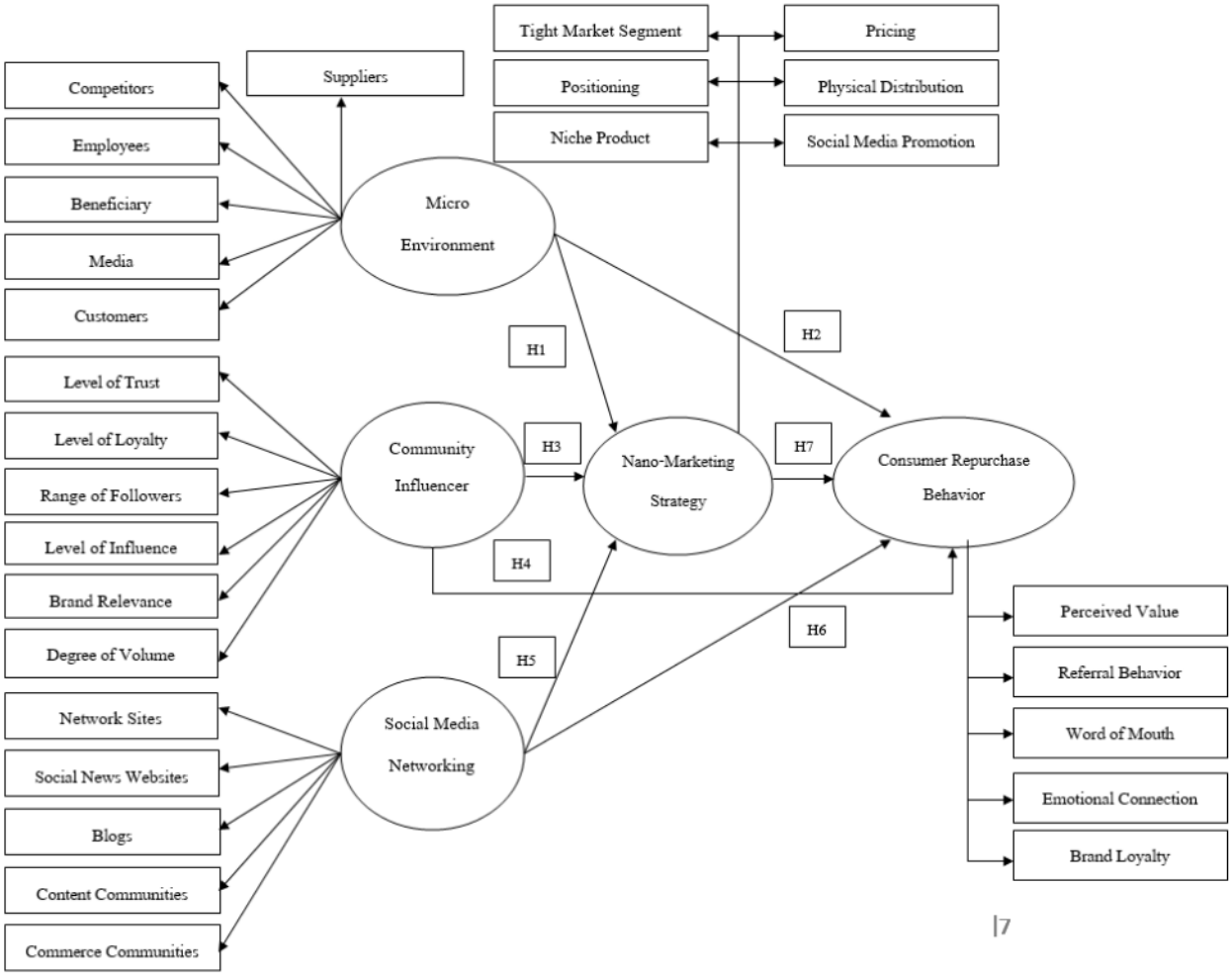

Figure 1.
Research Framework.

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5. Research Methodology

This study employs a mixed-methods approach, with the research area focusing on data collection from the cosmetic business sector, categorized into four types: 1) Hair Care, 2) Body Care, 3) Face Care, and 4) Make-Up.

The population consists of 25,580 cosmetic businesses (based on corporate data from the Department of Business Development, 2022). The sample includes 560 cosmetic businesses, selected using the Structural Equation Modeling (SEM) technique. According to the research framework, there are five latent variables and 31 observed variables. Statistical experts suggest that the sample size should be 15 to 20 times the number of observed variables (Hair et al., 2006) to be appropriate for multivariate analysis. Therefore, the suitable and sufficient sample size ranges from $15 \times 28 = 420$ to $20 \times 28 = 560$.

The research tools consist of two types:

1) Questionnaire - This is divided into six sections: Section 1 covers general organizational information of the respondents; Section 2 focuses on the Micro Environment; Section 3 examines Community influencer; Section 4 explores Social Media Networking; Section 5 addresses the Nano-Marketing Strategy; and Section 6 analyzes Consumer Repurchase Behavior.

The researcher submitted the draft questionnaire to five experts for content validity assessment using the Item-Objective Congruence (IOC) index, which resulted in a score of 0.9232. Additionally, a reliability test was conducted, yielding a score of 0.8872. These values indicate that the research instrument is highly valid and reliable for studying the causal factors of Nano-Marketing Strategy influencing Consumer Repurchase Behavior in the cosmetic business.

2) Interview - The interview consists of the following key questions:

- How do you perceive the overall micro environment of the cosmetic business? Which factors does it influence?
- Do you think the cosmetic business should integrate community influencer into its nano-marketing strategy? What impact would this have?
- What is your opinion on the social media networking of the cosmetic industry? Which factors does it affect?
- How do you see the relationship between micro environment, community influencer, and social media networking?
- Has your organization considered implementing a nano-marketing strategy? If so, in what way?
- Do you believe that nano-marketing strategy has a direct impact on consumer repurchase behavior? Why or why not?
- In order to influence consumer repurchase behavior, which variables do you think have a direct and indirect impact? How?

The researcher will collect data through in-depth interviews conducted between July 2024 and September 2024. The gathered data will be analyzed and synthesized before being described in a narrative format. Additionally, Content Analysis will be performed to refine and enhance the model derived from the quantitative research.

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Table 1.
Research Findings.

Objective 1	**Research Findings**
Micro Environment	The findings indicate that respondents have a high overall level of opinion regarding the micro environment. When examined by individual aspects, one aspect is rated at the highest level, while six aspects are rated at a high level. Respondents ranked their opinions on the customer aspect the highest, followed by employees, media, suppliers, beneficiaries, and lastly, competitors.
Community Influencer	The findings indicate that respondents have a high overall level of opinion regarding community influencer. When examined by individual aspects, all aspects are rated at a high level. Respondents ranked their opinions on the level of influence the highest, followed by the level of loyalty, level of trust, range of followers, employee empowerment, and lastly, the degree of content volume.
Social Media Networking	The findings indicate that respondents have a high overall level of opinion regarding social media networking. When analyzed by individual aspects, all aspects are rated at a high level. Respondents ranked their opinions on social news websites the highest, followed by blogs, content communities, network sites, and lastly, commerce communities.
Nano-Marketing Strategy	The findings indicate that respondents have the highest overall level of opinion regarding the nano-marketing strategy. When analyzed by individual aspects, two aspects are rated at the highest level, while four are at a high level. Respondents ranked pricing as the most important aspect, followed by niche products, physical distribution, positioning, tight market segments, and lastly, social media promotion.
Consumer Repurchase Behavior	The findings indicate that respondents have a high overall level of opinion regarding consumer repurchase behavior. When analyzed by individual aspects, two aspects are rated at the highest level, while three are at a high level. Respondents ranked brand loyalty as the most significant factor, followed by perceived value, substitution effect, emotional attachment, and lastly, word-of-mouth recommendations.
Objective 2	Research Findings
Micro Environment (MCEV)	Has a direct positive influence on the nano marketing strategy (NNMS) with an effect size of 0.12, which is statistically significant at the 0.05 level.
Micro Environment (MCEV)	Has a direct positive influence on consumer repurchase behavior (CRPB) with an effect size of 0.14, which is statistically significant at the 0.01 level.
Community Influencer (CMIF)	Has a direct positive influence on the nano marketing strategy (NNMS) with an effect size of 0.19, which is statistically significant at the 0.01 level.
Community Influencer (CMIF)	Has a direct positive influence on consumer repurchase behavior (CRPB) with an effect size of 0.11, which is statistically significant at the 0.05 level.
Social Media Networking (SMNW)	Has a direct positive influence on the nano marketing strategy (NNMS) with an effect size of 0.66, which is statistically significant at the 0.01 level.
Social Media Networking (SMNW)	Has a direct positive influence on consumer repurchase behavior (CRPB) with an effect size of 0.30, which is statistically significant at the 0.01 level.
Nano-Marketing Strategy (NNMS)	Has a direct positive influence on consumer repurchase behavior (CRPB) with an effect size of 0.74, which is statistically significant at the 0.01 level.
Micro Environment (MCEV), Community influencer (CMIF), and Social Media Networking (SMNW)	Has an indirect positive influence on consumer repurchase behavior (CRPB) through the nano marketing strategy (NNMS) with indirect effect sizes of 0.09, 0.14, and 0.49, respectively, which are statistically significant at the 0.01 and 0.05 levels.

Objective 3. Research findings revealed that the development of the model based on exploratory analysis and synthesis led the researcher to establish the name of the model as the Nano Marketing Strategy for Repurchase Behavior Model (NMSRB Model), which represents the nano marketing strategy influencing consumer repurchase behavior.

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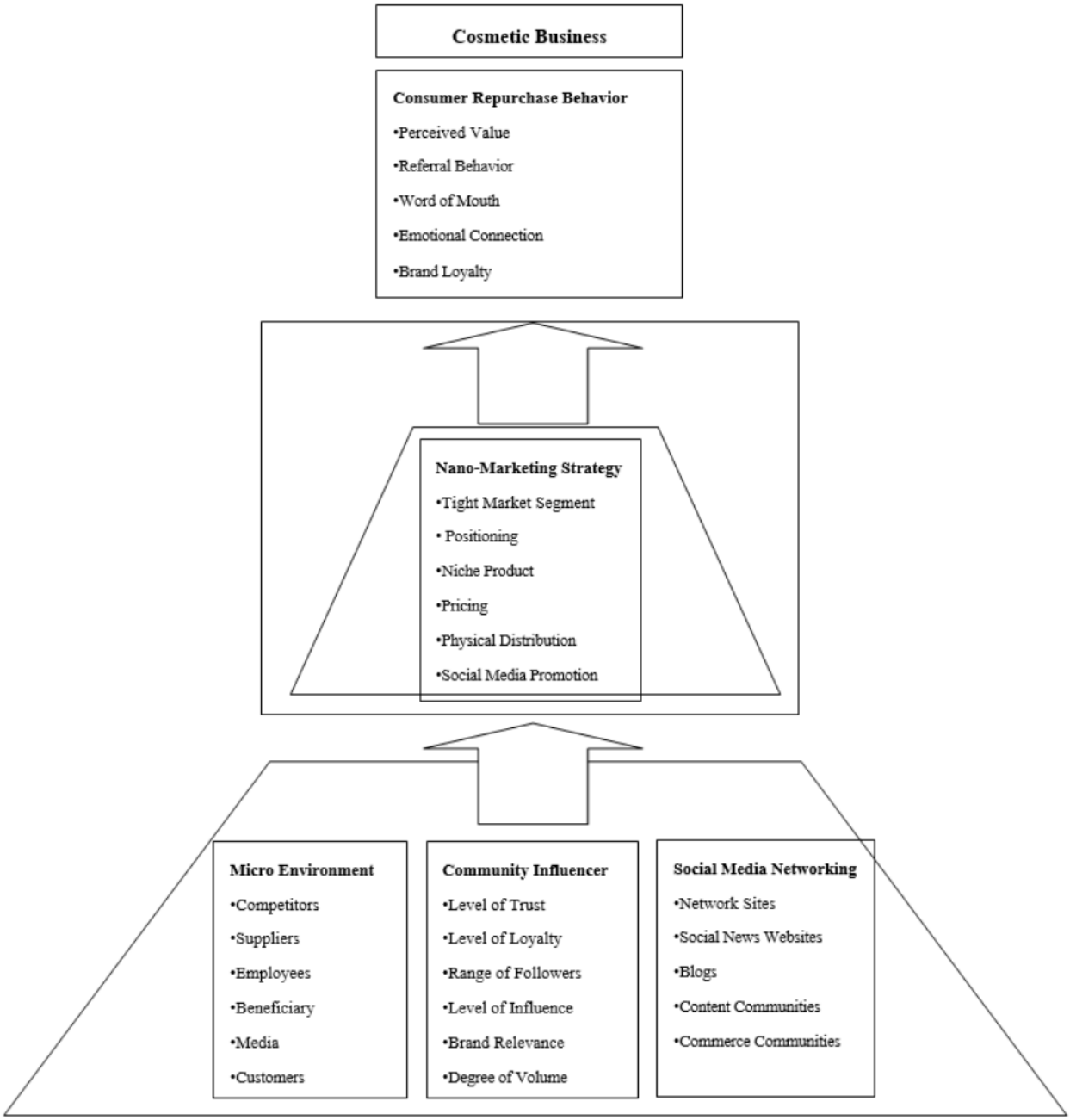

Figure 2.
Nano Marketing Strategy for Repurchase Behavior Model.

6. Discussion

The findings from Objective 1 and 2 reveal that:

- Micro Environment Affects Nano Marketing Strategy

The micro environment has a significant positive impact on nano-marketing strategy at a 0.01 statistical significance level. This suggests that changes or factors within an organization's micro environment—such as organizational culture, human resources, and management practices—clearly

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affect the development of nano-marketing strategy. These findings align with the study of Harshitha et al. (2021).

- Micro Environment Affects Customer Repurchase Behavior through Nano Marketing Strategy

The micro environment significantly affects consumer repurchase behavior through nano-marketing strategy at a 0.01 statistical significance level. This indicates that variations or adjustments in micro environmental factors—such as enhancing human resource capabilities (e.g., marketing staff or brand-building teams) or adapting marketing strategies to match consumer trends and demands—can significantly impact consumer repurchase decisions through nano marketing. This finding is consistent with the study of Taherian, et al. [10].

- Community Influence Affects Nano Marketing Strategy

Community influencer significantly impact nano-marketing strategy at a 0.01 statistical significance level. This means that engaging community influencer—who may have a relatively small but highly engaged and trusting audience—has a crucial influence on developing effective nano-marketing strategy. This finding is supported by the study of Doshi, et al. [13].

- Community Influencer Affects Customer Repurchase Behavior through Nano Marketing Strategy

Community influencer significantly impact consumer repurchase behavior through nano-marketing strategy at a 0.01 statistical significance level. The involvement of community influencer in endorsing and promoting products or services has a clear and statistically significant effect on consumers' repurchase decisions. This finding aligns with the research of Piriyakul and Piriyakul [16].

- Social Media Networking Affects Nano Marketing Strategy

Social media networking significantly impact nano-marketing strategy at a 0.01 statistical significance level. The ability of social media networking to connect brands with consumers fosters meaningful engagement and increases trust among followers of nano influencers. This connection allows for broad product awareness and benefits nano marketing strategy development. Through social media, consumers can interact with brands directly and continuously, share opinions, and exchange product experiences. This process strengthens repurchase behavior and long-term brand loyalty. These findings are consistent with the research of Khan and Ali [18].

- Social Media Networking Affects Customer Repurchase Behavior through Nano Marketing Strategy

Social media networking significantly impact consumer repurchase behavior through nano-marketing strategy at a 0.01 statistical significance level. This can be explained by the ability of social media networking to create a closer connection between brands and consumers through interactions with nano influencers—who maintain strong relationships with their followers. Consumers are more likely to repurchase products after having a positive experience from influencer recommendations and feeling confident in the endorsed products via these channels. As a result, social media networking become a powerful tool in stimulating repurchase behavior, aligning with the study of Kumar, et al. [21].

- Nano Marketing Strategy Affects Consumer Repurchase Behavior

Nano-marketing strategy significantly impact consumer repurchase behavior at a 0.01 statistical significance level. This indicates that nano-marketing strategy—which rely on influencers with smaller but highly engaged and trusted audiences—have a clear and significant effect on consumers' repurchase decisions. By utilizing nano-marketing strategy, brands can build trust and long-term relationships with consumers, leading to a higher likelihood of repeat purchases. This finding is supported by the research of Inah, et al. [24].

Through in-depth interviews (Objective 3), the research findings have led to the development of a causal relationship model explaining how nano-marketing strategy influence consumer repurchase behavior.

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7. Research Contribution

The research findings contribute to academic knowledge by explaining the causal factors of nano-marketing strategy that influence consumer repurchase behavior in the cosmetics business. This study enhances the understanding of the relationships among variables related to nano-marketing strategy and consumer repurchase behavior. The findings can be further developed and applied in academic studies in other fields.

8. Conclusion

Overall, the cosmetics industry involves the production and sale of cosmetic products, with efforts to expand brand presence and production through social media influencers. The extensive promotion of these products on social media accounts has made influencers a crucial marketing platform for cosmetic brands. However, brands must invest time and effort in identifying the right influencers for their campaigns. Mistakes in influencer marketing can lead to financial losses, difficulty in measuring outcomes, and high risks. The researcher collected data through online questionnaires and in-depth interviews with cosmetics businesses. The analysis revealed the following key findings: micro environment affected nano-marketing strategy, micro environment affected consumer repurchase behavior through nano-marketing strategy, community influencer affect nano-marketing strategy, community influencer affected consumer repurchase behavior through nano-marketing strategy, social media networking affected on nano-marketing strategy, social media networking affected consumer repurchase behavior through nano-marketing strategy, and nano-marketing strategy affected consumer repurchase behavior. The cosmetics business can develop plans in terms of the micro environment, influencers within specific groups, and social media networking, allowing the cosmetics business to identify nano-marketing strategy and consumer repurchase behavior. Cosmetic businesses can develop strategies focusing on micro environment, community influencer, and social media networking. This enables businesses to implement effective nano-marketing strategy and better understand consumer repurchase behavior. These insights can also help businesses respond to consumer demands and improve decision-making processes.

9. Recommendation

Future research should apply the causal relationship model of nano-marketing strategy affecting consumer repurchase behavior to validate its consistency with empirical data. Additionally, future studies should explore other significant factors that may influence nano-marketing strategy and consumer repurchase behavior, such as: product quality that is the effectiveness and relevance of cosmetic products to consumer needs significantly impact repurchase behavior; customer service that is prompt and excellent customer service enhances satisfaction and brand loyalty, product pricing that is reasonable pricing with good value for money can drive repurchase decisions; celebrity endorsements and advertising that is leveraging popular presenters or social media influencers in marketing campaigns can enhance brand credibility; third-party marketing that is customer reviews and testimonials from users who have experienced the products can strongly influence purchasing decisions; consumer experience that is providing a seamless customer journey, from website usability to after-sales service, improves overall consumer satisfaction; or social and environmental responsibility that is brands that demonstrate commitment to social and environmental responsibility can build stronger consumer trust and loyalty.

By incorporating these factors, future research can provide a more comprehensive understanding of the elements that drive consumer repurchase behavior in the cosmetics industry.

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Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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