



Digital Marketing Strategies by Utilizing Google Trend Data Analysis on Increasing the Income of Micro, Small and Medium Enterprises (MSMEs) in Sawang, Aceh Utara

Nanda Amelianny^{1, ,}, Nursakinah Ritonga^{2*}, Muchlis³, Dedi Feriadi⁴, Jamiati KN⁵

^{1,2,3,4,5} Universitas Malikussaleh ; Nanda.Amelianny@unimal.ac.id

* Correspondence: nursakinahrhg@unimal.ac.id

Abstract. This research is motivated by the importance of optimizing digital marketing strategies for MSMEs in the digital era, especially in Sawang District, North Aceh. By utilizing Google Trends as a data analysis tool, the research aims to optimize digitalbased marketing strategies for MSMEs in the region. The research method includes three main stages: 1) Data collection through surveys and short interviews with MSME players and data retrieval from Google Trends; 2) Data analysis using statistical techniques using population and sample size; 3) Development and implementation of digital marketing strategies based on the analysis results. The targeted outputs include an effective digital marketing strategy model for MSMEs, scientific publications, and improved digital marketing skills of MSME players. This research is at Technology Readiness Level (TKT) 6, where the model or design has been tested in a relevant environment. In this context, the developed digital marketing strategy will be tested and implemented on several MSMEs in Sawang Sub-district as samples, to validate its effectiveness and readiness for implementation on a wider scale.

Keywords: Data analysis, Google Trends, Digital marketing strategy, MSMEs

1. Introduction

The importance of this research lies in its potential to empower MSMEs in facing challenges in the digital era. According to Purwana et al. (2020), MSMEs in Indonesia still face various obstacles in the adoption of digital technology, including limited knowledge and resources. By utilizing Google Trends, MSMEs can gain insight into consumer interests and behavior in real time, which can be the basis for strategic decision making in digital marketing (Setiawan et al., 2022).

The problem to be investigated is how the influence of digital marketing strategies by utilizing Google Trend Data Analysis on Increasing the Income of MSME Actors in Sawang District. This research will use a quantitative approach with an explanatory method, where MSMEs will be provided with training and assistance in using Google Trends for market analysis and digital marketing strategy development. The hypothesis to be tested is that the application of data analysis using Google Trends will significantly improve the digital marketing performance of MSMEs, as measured through increased website traffic, social media engagement, and online sales conversions so that later it will be able to increase



MSME revenues. The purpose of this study is to analyze digital marketing strategies with the application of Google Trends in increasing MSME revenues in Sawang District. Specifically, this study aims to explain and analyze the effect of marketing strategies in the form of Segmenting, Targeting, Positioning by utilizing Google Trend data analysis on increasing the income of MSME actors.

This research is also in line with the national development agenda in encouraging the digital transformation of MSMEs. According to Tayibnaxis et al. (2021), the digitalization of MSMEs is one of the keys to improving Indonesia's economic competitiveness in the era of the Industrial Revolution 4.0. By focusing on the application of Google Trends, this research is expected to make a practical contribution in accelerating the adoption of digital technology among MSMEs, especially in relatively underdeveloped areas such as Sawang District. Furthermore, Utomo et al. (2021) emphasized the importance of a structured approach in introducing digital technology to MSMEs. This research will adopt this approach by designing a comprehensive training and mentoring program, considering the level of digital literacy and the unique characteristics of MSMEs in Sawang sub-district. This is in line with the findings of Nugroho et al. (2022), which show that the successful adoption of digital technology in MSMEs is highly dependent on the suitability of the solutions offered to the needs and capacities of MSMEs.

2. Literature Review

Marketing Strategy

Marketing Strategy is an integrated plan as a basic step to direct marketing activities to target markets by developing marketing programs to achieve company goals. Marketing Strategy is making decisions in relation to marketing costs, marketing mix, marketing allocation with expected environmental conditions and competitor conditions (Jati, 2017). The marketing mix consists of 4Ps consisting of product, price, location and promotion. **Product** is anything that can be offered to the market for attention, purchase, or consumption. (Sunu, 1995: 99). According to Kotler (2000: 18) products are measured by the following indicators:

1. Product diversity
2. Quality
3. Design
4. Shape
5. Brand name
6. Size
7. Service
8. Warranty
9. Rewards

Price is a monetary unit or other measure (including other goods and services) that is exchanged in order to obtain ownership rights or use of a good or service (Tjiptono, 1995: 118). According to Kotler (2000: 18) prices can be measured by indicators:

1. Price list
2. Discount
3. Special discounts
4. Credit terms
5. Payment period



The **distribution** channel is a group of intermediaries who are closely related to each other and who distribute products to buyers. (Winardi, 1992: 299). According to Kotler (2000: 18) place can be measured by indicators:

1. Marketing channels
2. Marketing coverage
3. Grouping
4. Location
5. Inventory

Promotion is a good strategic combination of advertising variables, personal selling, and other promotional tools planned to achieve the objectives of the sales program. (Swastha, 2000: 35). According to Kotler (2000: 18) promotion can be measured by indicators:

1. Sales promotion
2. Advertising
3. Sales force
4. Public Relations
5. Direct marketing

Sales Increase

Sales volume is the net sales of the company's profit statement. Net sales are obtained through the sales results of all products during a certain period of time and the sales results achieved from market share which is a potential sale that can consist of groups of buyers during a certain period of time. (Swastha, 2005: 65). The indicators of increased sales according to Swastha (2008: 404) are as follows:

1. Achieving sales volume
2. Getting profi

3. Research Method

Metode Penelitian This research uses Explanatory Research (explanatory study or hypothesis submission). This study aims to explain the position of the variables studied and the relationship between one variable and another. While the approach used in this research is a quantitative approach. The population in this study were SMES's actors in Sawang District, North Aceh Regency, totaling 33 people. The sampling technique applied in this study was a full sample, namely taking the entire population as a sample. The data analysis method used in this study consists of several tests, namely the research instrument test which consists of an instrument test consisting of a validity test and a reliability test, a normality test, then a multiple linear regression test using SPSS.

4. Results and Discussion

Coefficients^a

	Unstandardized Coefficients	Standardized Coefficients		



Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	.925	.448		2.062	.048
	Product	.272	.046	.242	5.889	.000
	Price	.856	.037	.755	23.335	.000
	Place	.163	.032	.142	5.052	.000
	Promotion	.105	.024	.097	4.308	.000

Table 1. Multiple Linear Regression Test Results

The results of data analysis show that the independent variable, namely the product variable, provides a positive value for increasing sales of MSMEs in Sawang District, North Aceh Regency. The price variable gives a positive value to the increase in sales of MSMEs in Sawang District, North Aceh Regency. While the promotion variable gives a positive value to the increase in sales of MSMEs in Sawang District, North Aceh Regency. The place variable also made a positive contribution to the increase in sales of MSMEs in Sawang District, North Aceh Regency.

The coefficient value shows that every time there is an increase in Product, Price, Place and Promotion, there will be an increase in sales of MSMEs in Sawang District, North Aceh Regency. In this study there are several indicators that can increase or increase sales. Indicators of product variables that can increase sales are product diversity, quality, design, brand name, service, and warranty. Indicators of price variables that can increase and increase sales are price lists, discounts, rebates, and payment periods. Indicators of location variables that can increase sales are marketing channels, marketing coverage, grouping, location, and inventory. Indicators of promotional variables that can increase and increase sales are sales promotion, advertising, sales force, and direct marketing. The indicators of sales increase in this study are achieving sales volume, getting profit, and supporting company growth.

The results of hypothesis testing prove that there is an influence of the marketing mix; product, price, promotion, and location partially on increasing sales of MSMEs in Sawang District, North Aceh Regency have a positive and significant influence. Among the four independent variables that have the most significant effect on the dependent variable is the Price variable. The price indicator in the third statement item on the price variable is the highest value. This means that the price of MSME products in Sawang District is affordable by consumers. Furthermore, the product variable is the second order that affects the increase in income of MSMEs in Sawang District with a T count of 5.701. The product variable indicator in the fifth statement has the highest score. This states that the services of MSME players in Sawang District are considered good. Furthermore, in third place that influences the increase in MSME income in Sawang District is the Promotion variable with a T count of 4.665. The statement item that has the highest value is the second statement that Sawang District MSME actors need to carry out promotions continuously so that their products are easily remembered by consumers.

The results of this study are in line with research conducted by Kurdi (2018) that marketing strategies using the Marketing Mix consisting of Product, Price, Promotion, and Place have a positive and significant effect on Increasing Sales at Sharia Financial Services Cooperatives

in Kendal Regency. The results of this study are also supported by research conducted by (Riyanto, 2014) that the use of Google trends is able to increase the competitiveness of MSMEs by implementing the right marketing strategy so that the output that occurs is an increase in MSME sales.

With a level of significance of 0.05, the F-count is 1202.14, the F-table is (number of data 30) = 2.660 (F-count > F-table). Thus, it is proven that the alternative hypothesis is accepted which states that all independent variables (product, price, promotion, and location) simultaneously and significantly affect the dependent variable (increase in sales). The results of this simultaneous test (F-test) answer the problem that the marketing mix variables; product, price, promotion, and location together have a significant effect on increasing sales at MSMEs in Sawang District.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	246.053	4	61.513	1202.140	.000 ^b
	Residual	1.586	31	.051		
	Total	247.639	35			

a. Dependent Variable: peningkatan penjualan

b. Predictors: (Constant), Promosi, Tempat, Harga, Produk

Table 2 Simultaneous test results (F)

The Coefficient of Determination test states that how good (goodness of fit) the regression equation is. The coefficient of determination of 0.994 indicates that 99.4% of the variation in the sales increase variable can be explained by the product (X1), price (X2), promotion (X3) and location (X4) variables. While the other 0.6%% is explained by other variables that are not included in the model. According to Setiaji (2004: 20), an R2 value of 0.2 or 0.3 is good enough in variable assessment.

Model Summary^b

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.997 ^a	.994	.993	.226

a. Predictors: (Constant), Promosi, Tempat, Harga, Produk

b. Dependent Variable: peningkatan penjualan

Table 3. Determination Test



Conclusion

Based on the research analysis, the researcher concluded the following research results:

1. Marketing mix; product, price, promotion and location have a positive and significant influence and contribute to increasing sales in MSMEs in Sawang District, North Aceh Regency.
2. The use of Google Trend data analysis can improve the ability of MSME players to implement the right marketing strategy.
3. The price variable has a dominant influence in increasing sales of MSMEs in Sawang District, North Aceh Regency. The prices offered by Sawang District MSMEs are relatively affordable by consumers.

Reference

- Hidayat, A., Wijaya, T., & Ishak, A. (2021). Analisis sentimen konsumen menggunakan Google Trends untuk pengembangan strategi pemasaran digital UMKM. *Jurnal Manajemen dan Kewirausahaan*, 23(1), 26-38.
- Nugroho, M. A., Susilo, A. Z., Fajar, M. A., & Rahmawati, D. (2022). Adopsi teknologi digital pada UMKM pasca pandemi: Tantangan dan strategi. *Jurnal Ekonomi dan Pembangunan Indonesia*, 22(2), 167-184.
- Purwana, D., Rahmi, R., & Aditya, S. (2020). Pemanfaatan digital marketing bagi usaha mikro, kecil, dan menengah (UMKM) di Kelurahan Malaka Sari, Duren Sawit. *Jurnal Pemberdayaan Masyarakat Madani*, 1(1), 1-17.
- Rahadi, D. R., & Susilowati, E. (2023). Strategi pemasaran digital untuk UMKM: Studi kasus di Kota Bandung. *Jurnal Riset Manajemen dan Bisnis*, 8(1), 45-62.
- Setiawan, B., Puspitasari, N., & Manurung, E. T. (2022). Implementasi Google Trends dalam pengembangan strategi content marketing UMKM. *Jurnal Sistem Informasi*, 18(2), 85-96.
- Tayibnapis, A. Z., Wuryaningsih, L. E., & Gora, R. (2021). Transformasi digital UMKM dalam meningkatkan daya saing di era Revolusi Industri 4.0. *Jurnal Ekonomi dan Bisnis*, 24(1), 65- 86.
- Utomo, Y., Priyanto, S. H., & Suharti, L. (2021). Faktor-faktor yang mempengaruhi adopsi teknologi digital pada UMKM: Sebuah tinjauan sistematis. *Jurnal Manajemen Teknologi*, 20(1), 79- 103.
- Hidayat, A., Wijaya, T., & Ishak, A. (2021). Analisis sentimen konsumen menggunakan Google Trends untuk pengembangan strategi pemasaran digital UMKM. *Jurnal Manajemen dan Kewirausahaan*, 23(1), 26-38.
- Nugroho, M. A., Susilo, A. Z., Fajar, M. A., & Rahmawati, D. (2022). Adopsi teknologi digital pada UMKM pasca pandemi: Tantangan dan strategi. *Jurnal Ekonomi dan Pembangunan Indonesia*, 22(2), 167-184.
- Purwana, D., Rahmi, R., & Aditya, S. (2020). Pemanfaatan digital marketing bagi usaha mikro, kecil, dan menengah (UMKM) di Kelurahan Malaka Sari, Duren Sawit. *Jurnal Pemberdayaan Masyarakat Madani*, 1(1), 1-17.



Rahadi, D. R., & Susilowati, E. (2023). Strategi pemasaran digital untuk UMKM: Studi kasus di Kota Bandung. *Jurnal Riset Manajemen dan Bisnis*, 8(1), 45-62.

Setiawan, B., Puspitasari, N., & Manurung, E. T. (2022). Implementasi Google Trends dalam pengembangan strategi content marketing UMKM. *Jurnal Sistem Informasi*, 18(2), 85-96.

Tayibnapis, A. Z., Wuryaningsih, L. E., & Gora, R. (2021). Transformasi digital UMKM dalam meningkatkan daya saing di era Revolusi Industri 4.0. *Jurnal Ekonomi dan Bisnis*, 24(1), 65- 86.

Utomo, Y., Priyanto, S. H., & Suharti, L. (2021). Faktor-faktor yang mempengaruhi adopsi teknologi digital pada UMKM: Sebuah tinjauan sistematis. *Jurnal Manajemen Teknologi*, 20(1), 79- 103.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*(4th ed.). Thousand Oaks, CA: SAGE Publications.

Moleong, L. J. (2017). *Metodologi Penelitian Kualitatif (Edisi Revisi)*. Bandung: PT Remaja Rosdakarya.

Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabet

Chaffey, D., & Ellis-Chadwick, F. (2022). *Digital Marketing: Strategy, Implementation and Practice* (8th ed.). Pearson.

Creswell, J. W., & Creswell, J. D. (2023). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (6th ed.). SAGE Publications.

Kumar, R. (2023). *Research Methodology: A Step-by-Step Guide for Beginners* (6th ed.). SAGE Publications.

Sekaran, U., & Bougie, R. (2022). *Research Methods for Business: A Skill Building Approach* (9th ed.). Wiley.

Yin, R. K. (2023). *Case Study Research and Applications: Design and Methods* (7th ed.). SAGE Publications.

Bryman, A. (2024). *Social Research Methods* (6th ed.). Oxford University Press.

Creswell, J. W., & Creswell, J. D. (2023). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (6th ed.). SAGE Publications.

Kumar, R. (2023). *Research Methodology: A Step-by-Step Guide for Beginners* (6th ed.). SAGE Publications.

Neuman, W. L. (2024). *Social Research Methods: Qualitative and Quantitative Approaches* (9th ed.). Pearson.

Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research Methods for Business Students* (9th ed.). Sugiyono. (2023). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (3rd ed.). Alfabeta.

Kurdi, S. M. (2018). Pengaruh Bauran Pemasaran Terhadap Peningkatan Penjualan Pada Koperasi Jasa Keuangan Syariah di Kabupaten Kendal . *BISE: Jurnal Pendidikan Bisnis dan Ekonomi*.

Riyanto, A. D. (2014). PEMANFAATAN GOOGLE TRENDS DALAM PENENTUAN KATA KUNCI SEBUAH PRODUK UNTUK MENINGKATKANDAYA SAING PELAKU BISNIS DI DUNIA INTERNET . *Seminar Nasional Informatika 2014 (semnasIF 2014)*.

