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Analysis of Digital Marketing Based on Trust-Based System (Velar Blockchain) in MSMEs: A Case Study of Dapur Ma' Nay

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Keywords:	ABSTRACT
Blockchain; Velar; Digital Marketing; Culinary MSMEs; DeFi; Financial Innovation.	*This research aims to analyze and integrate the application of Velar blockchain technology into the digital marketing strategy of culinary Micro, Small, and Medium Enterprises (MSMEs) in Indonesia, specifically in Samarinda. The case study focuses on the culinary MSME, Dapur Ma' Nay, located in Samarinda, East Kalimantan. In the era of economic digitalization, MSMEs face challenges such as limited access to technology, lack of transaction transparency, and low efficiency in digital promotion. Using a descriptive-qualitative approach, this study combines empirical data from field observations with the theory of decentralized digital finance (DeFi) championed by the Bitcoin Layer-2 (Stacks) based Velar protocol. The findings indicate that the integration of the Velar system can provide transaction efficiency, enhance customer trust through blockchain transparency, and strengthen the effectiveness of tokenization-based digital promotion. This research contributes to the development of an MSME digital marketing model that is adaptive to financial technology innovation*

I. INTRODUCTION

MSMEs (Micro, Small, and Medium Enterprises) are the backbone of the Indonesian economy. Based on data from the Ministry of Cooperatives and MSMEs (2023), over 97% of the national workforce is absorbed by the MSME sector, contributing up to 60% of the GDP. However, amidst the global digital transformation, most MSMEs still face barriers in adopting digital marketing technology and modern financial systems.

A concrete example is the culinary MSME, *Dapur Ma' Nay*, operating in Samarinda, East Kalimantan. This business shares common characteristics of Indonesian MSMEs: family-managed, small-scale, and reliant on traditional promotion like *word of mouth*. These limitations hinder their ability to reach wider markets and increase competitiveness in the modern market.

Simultaneously, blockchain technology is rapidly evolving as a new foundation for global digital finance. Velar, a DeFi (Decentralized Finance) protocol based on *Bitcoin finality* and *Stacks Layer-2*, offers solutions to address issues of trust, transparency, and transaction efficiency. By adopting the principle of decentralization, Velar enables a digital marketing management system that is more secure, open, and verifiable without intermediaries.

The primary objectives of this research are:
1. To analyze the current digital marketing strategy of the *Dapur Ma' Nay* MSME.
2. To identify the potential application of Velar technology in digital promotion and transaction systems.
3. To design a blockchain-based digital marketing integration model to enhance efficiency and customer trust.

This research is important because it offers a new paradigm in MSME digitalization, focusing not just on *digital marketing* but on a *trust-based marketing system* built on blockchain.

II. LITERATURE REVIEW
2.1. MSMEs and Digital Transformation
MSMEs in Indonesia play a crucial role in driving the national economy. Their contribution to GDP reaches 60.5% with about 65 million business units across Indonesia. However, digital transformation remains a major challenge, particularly for MSMEs in the culinary sector, which still rely on conventional promotional systems.

Digitalization involves a comprehensive transformation of how a business operates, from marketing and transactions to financial management. Modern entrepreneurs are required to utilize information technology to increase efficiency and innovation (Hisrich & Peters, 2018). oted, modern entrepreneurs are required to leverage information technology to increase efficiency and innovation. In this context, digital marketing is a crucial tool for MSMEs to expand market reach, measure promotional effectiveness, and build long-term relationships with customers.

2.2. Digital Marketing Strategies for MSMEs
Digital marketing is the activity of promoting products or services through digital media to reach a wider market efficiently (Kotler & Keller, 2016). For MSMEs, implementing digital marketing strategies such as social media, search engine optimization (SEO), and content marketing can increase customer engagement and strengthen brand image.

The effectiveness of digital marketing can be measured through the *Return on Investment (ROI)* ratio (Chaffey & Ellis-Chadwick, 2019). In the context of *Dapur Ma' Nay*, media like WhatsApp and Facebook are used, but they are not strategically optimized through paid digital advertising or sales analytics systems.

Digital Marketing ROI Formula:
Rumus ROI Pemasaran Digital (Digital Marketing ROI Formula):

$$ROI = \frac{Revenue - Promotion\ Cost}{Promotion\ Cost} \times 100\%$$

A simple example: if Dapur Ma' Nay spends Rp. 500,000 on digital promotion and generates additional sales of Rp. 1,200,000, then:

$$ROI = \frac{1.200.000 - 500.000}{500.000} \times 100\% = 140\%$$

This means that digital promotion generates a net profit of 1.4 times the cost of promotion.

2.3. Blockchain Technology and Decentralized Finance (DeFi)
Blockchain is a decentralized, transparent, and immutable digital record-keeping system. This technology allows transactions to be recorded publicly without intermediaries like traditional financial institutions. Bitcoin's blockchain creates a *trustless system* where transaction validation is done by a network of users, not a single authority (Nakamoto, 2008). *Decentralized Finance (DeFi)* replaces the functions of conventional financial institutions with *smart contracts* , offering open, fast, and efficient financial access (Trust Machines, 2022). This

model is particularly relevant for MSMEs, which often face challenges in accessing credit and financial transparency.

Blockchain is a decentralized digital ledger that ensures data transparency and immutability. In financial applications, decentralized finance (DeFi) eliminates intermediaries by allowing users to interact through smart contracts. DeFi provides a more inclusive and secure financial environment for small businesses.

2.4. Velar: Bitcoin-Based DeFi Ecosystem

Velar is a DeFi protocol with *Bitcoin finality* developed on the Stacks Layer-2 network. Velar aims to build a decentralized financial ecosystem on top of Bitcoin's security (Velar Whitepaper, 2023). Velar enables more efficient asset tokenization and payment systems, including the use of *sBTC* (synthetic Bitcoin). This can be applied to MSMEs to increase customer transaction transparency, reduce digital payment costs, and present a *loyalty program* system based on the $VELAR token.

Velar is a multi-feature DeFi protocol built on Stacks, designed to unlock Bitcoin's potential in decentralized finance. It enables applications such as automated liquidity pools, staking, and launchpads with Bitcoin finality. Through tokenization and smart contracts, Velar can enhance transparency and financial efficiency for small businesses.

Velar enables the adoption of asset tokenization and more efficient payment systems, including the use of sBTC (synthetic Bitcoin), which acts as a bridge between the Bitcoin and Stacks networks. This can be applied in MSMEs to:

1. Increase transparency of customer transactions;
2. Reduce digital payment costs;
3. Introduce a $VELAR token-based loyalty program.

2.5. Integrating Blockchain with MSME Marketing Strategy

Blockchain integration can create a *trust-based marketing* promotion system. Velar's *smart contract* capability can support customer incentive systems like automatic *cashback* and *loyalty points* without an intermediary.

The following table shows a comparison between conventional and blockchain-based digital marketing systems:

Table 1: Comparison of Conventional & Blockchain Marketing (Velar)

Aspek	Conventional Marketing	Blockchain-Based Marketing -Velar
Transaction Transparency	Closed, relies on third parties	Open, publicly verifiable
Promotion Cost	Relatively high (paid advertising)	Can be reduced through tokenization system
Customer Trust	Depends on brand reputation	Built through blockchain records
Data Security	Susceptible to manipulation	Guaranteed by encryption and consensus
Loyalty Program	Manual, often inefficient	Automatic via *smart contracts*

Source: Nakamoto, Trust Machines, Velar Whitepaper.

Blockchain integration transforms traditional marketing into a transparent and automated system. By utilizing Velar, MSMEs can establish customer trust, reduce transaction costs, and automate loyalty programs through smart contracts.

III. RESEARCH METHODS
3.1. Type and Approach of Research

This research uses a **descriptive-qualitative approach** with a **case study** method. Data was collected through direct observation, semi-structured interviews with the business owner, and literature studies (Velar Whitepaper, 2023; Kotler & Keller, 2016; Hisrich & Peters, 2018).

This study employs a qualitative descriptive approach using a case study method. It aims to analyze the real-world business operations of *Dapur Ma' Nay* and assess the feasibility of integrating Velar blockchain technology into its digital marketing strategies. Data collection includes observation, semi-structured interviews, and literature review.

3.2. Research Location and Subjects

The research was conducted at the culinary MSME Dapur Ma' Nay, located in the APT Pranoto Airport Complex, North Samarinda, East Kalimantan. This business was established in 2019 and is managed by Indah Septiana & Sigit Subandoro. The business's primary focus is providing ready-to-eat meals (fried rice, geprek chicken, mixed rice) and catering services.

The research subjects consisted of:
1. The business owner
2. Two operational employees
3. Five regular customers
4. Financial documents and sales records

The research focuses on *Dapur Ma' Nay*, a small culinary enterprise located in Samarinda, East Kalimantan. The business specializes in affordable home-cooked meals and small-scale catering. Respondents include the owner, employees, and loyal customers.

3.3. Data Type and Collection Techniques

The types of data used include:
- Primary data: results of direct observations and interviews with business owners.
- Secondary data: academic literature, national MSME reports, and the Velar Whitepaper (2023).

Data collection techniques include:
1. Field observations: production activities, transaction systems, and promotions.
2. Semi-structured interviews: owner perceptions of digitalization.
3. Documentation: daily sales reports and promotional activities.

Data were collected through field observations, semi-structured interviews, and documentation analysis. Primary data include financial and operational aspects, while secondary data derive from official reports and blockchain literature.

3.4. Research Variables and Indicators

This study consists of two main variables:

Table 2: Research Variables and Indicators

Variabel	Operational Definition	Measurement Indicators
Digital Marketing Strategy (X1)	Efforts to promote products through digital platforms to increase market reach.	- Social media usage - Digital promotion cost - ROI ratio of digital campaigns
Integrasi Blockchain Velar (X2)	Application of the Velar protocol for transaction efficiency and customer reward system.	- Use of smart contracts - Transaction security - Customer transparency
MSME Performance (Y)	Level of revenue growth and customer loyalty.	- Sales growth - Profit margin - Customer retention

Source: Processed by Researcher

The study analyzes two independent variables—digital marketing strategy (X1) and Velar blockchain integration (X2)—and one dependent variable, MSME performance (Y).

3.5. Data Analysis Techniques

Data analysis was conducted through three main stages:
1) Data Reduction – selecting and simplifying information relevant to the research objectives.
2) Data Display – presenting data in tables and graphs to facilitate analysis of relationships between variables.
3) Conclusion Drawing – interpreting results based on digital marketing theory and blockchain technology.

In addition to qualitative analysis, this study used a digital efficiency ratio analysis approach and ROI simulation to illustrate the impact of blockchain integration on MSME performance.

3.6. Digital Financial Efficiency Model

To measure the contribution of digitalization to MSME revenue, the following formula is used:

$$EFD = \frac{Digital\ Revenue}{Total\ Revenue} \times 100\%$$

Source: Processed by Researcher

Description:
- EFD = Digital Financial Efficiency
- Digital Revenue = total revenue from online/digital-based transactions
- Total Revenue = all business revenue

The *Digital Financial Efficiency (EFD)* ratio measures the percentage of total income generated through digital channels. Higher EFD indicates better digital adoption and efficiency.

3.7. Research Design

Table 3: Research Flow Diagram/Scheme

Tahap Penelitian	Main Activity	Output
Tahap I	Observation of *Dapur Ma' Nay* MSME	Data on finance, production, marketing
Tahap II	Analysis of digital strategy and adoption barriers	Identification of innovation needs
Tahap III	Study of Velar technology and integration model	Design of a blockchain-based marketing system
Tahap IV	Financial and efficiency simulation	Results of ROI and EFD ratios
Tahap V	Interpretation of results and report drafting	Conclusions and policy recommendations

Source: Processed by Researcher

The research design follows five sequential phases: observation, strategy analysis, technology integration review, financial simulation, and final interpretation.

IV. RESULTS AND DISCUSSION

4.1. Overview of Dapur Ma' Nay

Dapur Ma' Nay is a culinary MSME established in 2019 in North Samarinda, East Kalimantan. The business provides home-cooked meals, with main menu items such as fried rice, geprek chicken, fried noodles, snacks, and small-scale catering services.

With an average price of IDR 12,000 per portion and a daily sales volume of 50–100 portions, estimated daily revenue ranges from IDR 600,000 to IDR 1,200,000. Average daily net profit is around 30–40% after deducting raw material and operational costs.

Despite its strong market potential, Dapur Ma' Nay still faces several major challenges:
1) Promotion is still traditional (word of mouth).
2) Financial records have not been digitized.
3) There is no data-based customer loyalty system.
4) Access to digital payments is still limited.

Dapur Ma' Nay operates as a micro culinary enterprise offering affordable local dishes. Despite stable daily revenue, challenges remain in digital marketing, financial transparency, and customer engagement.

4.2. Financial and Operational Efficiency Analysis

Based on observations and interviews, an estimate of the daily financial structure was obtained.

Table 4: Estimated Daily Financial Structure

Komponen (Component)	Biaya (Rp) (Cost (IDR))	Persentase (%) (Percentage (%))
Gross Revenue	1.000.000	100
Raw Materials	400.000	40
Operational Costs	150.000	15
Labor	100.000	10
Net Profit	**350.000**	**35**

Source: Primary Data from Interview and Observation, 2025.

The Digital Financial Efficiency (EFD) ratio, assuming 20% of transactions are through digital channels, is 20%.

$$EFD = \frac{Digital\ Revenue}{Total\ Revenue} \times 100\% = \frac{200.000}{1.000.000} \times 100 = 20\%$$

Interpretation:

A digital efficiency rate of 20% indicates that Dapur Ma' Nay is only utilizing a small portion of digital potential for transactions and marketing.

4.3. Analysis of Digital Marketing Strategy

Prior to blockchain integration, Dapur Ma' Nay relied on promotions via WhatsApp and Facebook without an analytics system, a simulation of a targeted digital marketing application (e.g., IDR 500,000/month paid advertising) yielded the following results:

Table 5: Digital Marketing Strategy Analysis (ROI)

Indikator (Indicator)	Before Digitalization	After Digitalization (Simulation)
Monthly Promotion Cost (IDR) (Rp)	100.000	500.000
Additional Sales (IDR)	0	1.200.000
ROI (%)	–	140
Customer Reach	Local vicinity	+300% (via social media)

Source: Results by Researcher, 2025

Rumus ROI:

$$ROI = \frac{Revenue - Promotion\ Cost}{Promotion\ Cost} \times 100 = \frac{1.200.000 - 500.000}{500.000} \times 100 = 140\%$$

The digital marketing simulation shows a 140% ROI, proving that structured online promotion significantly enhances revenue potential and customer outreach for MSMEs.

4.4. Integration of Velar Blockchain Technology

4.4.1. Integration Concept

Velar, as a Bitcoin-based DeFi ecosystem, enables trustless and transparent transactions and customer incentive systems. The proposed integration model for Dapur Ma' Nay consists of three layers:

Table 6: Velar Blockchain Integration Concept (3 Layers)

Lapisan (Layer)	Function	Benefit for MSME
Layer 1 (Bitcoin)	Security and transaction finality	Guarantees financial data security
Layer 2 (Stacks + Velar)	Smart contract & tokenization	Automation of customer loyalty system
MSME App	Interface for cashier & customers	Easy use without technical expertise

Source: research results

The integration model uses Bitcoin's security, Stacks' smart contracts, and Velar's DeFi functions to automate loyalty programs and digital payments.

4.4.2. Transaction Efficiency Simulation

The following is a comparison simulation between conventional payment systems and the Velar blockchain:

Table 7: Transaction Efficiency Comparison Simulation

Aspect	Conventional (Cash/QRIS)	Blockchain Velar (sBTC)
Transaction Time	1–3 minutes	<10 seconds
Transaction Fee	1,5–2,0% per transaction	0,1–0,3%
Data Security	Depends on service provider	Guaranteed by Bitcoin consensus
Transparency	Limited to the cashier	Public and immutable
Customer Incentives	Manual, unintegrated	Automatic via *smart contract*

Source: research results

Analysis:

Velar implementation has the potential to reduce transaction costs by up to 90% and accelerate payments by up to 15 times compared to conventional systems**.**

4.4.3. Transaction Efficiency Graph

Transaction Fees(%)

2.0% (Conventional)
0.2% (Velar Blockchain)
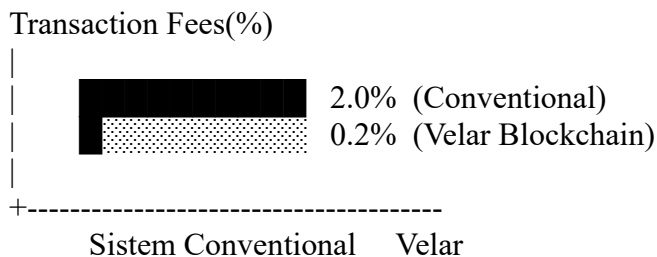
Sistem Conventional   Velar

Figure 1. Comparison of Transaction Fees for Conventional System and Velar Blockchain
Source: research results

Interpretation: The graph shows a significant reduction in transaction fees with the use of Velar

4.5. Velar-Based Digital Marketing Integration Model

Based on the analysis results, the following system integration model is proposed to increase the competitiveness of Dapur Ma' Nay:

System Component	Functional Description	Output
Digital Promotion Platform	Uses social media (Facebook, Instagram, WhatsApp Business) with integrated analytics.	Increased customer reach and positive ROI.
Velar Payment System (sBTC)	Customers pay using the Velar digital wallet.	Fast and secure transactions.
$VELAR Token Loyalty Program	Each transaction automatically provides a token reward.	Increases customer retention.
Business Owner Dashboard	Displays sales data, loyalty, and digital efficiency.	Data-based decision making.

Source: (Integration Model Design by Researcher, 2025)

The proposed model combines digital promotion, blockchain-based payments, and tokenized loyalty programs to build a transparent, efficient, and customer-centric MSME ecosystem.

V. CONCLUSIONS

5.1. Conclusions

This research shows that the integration of Velar blockchain technology into the digital marketing strategy can significantly impact efficiency, transparency, and customer trust for culinary MSMEs. Key findings from the *Dapur Ma' Nay* case study are:

1) Digital marketing can increase promotional efficiency with an ROI ratio of up to 140%.
2) Velar blockchain integration can reduce transaction fees from 2% to 0.2%.
3) Token-based loyalty programs ($VELAR) potentially increase customer retention.
4) Blockchain implementation is a *trust-based marketing* strategy.
5) The study concludes that the integration of Velar blockchain technology into MSME digital marketing strategies enhances operational efficiency, transparency, and customer trust. Velar's decentralized system not only optimizes transaction costs but also enables automated, tokenized loyalty programs that strengthen customer engagement.

5.2. Managerial Implications

For MSMEs, the results of this study provide three important implications:

1) Digitalization as a key strategy: Implementing digital financial recording systems, data-driven promotions, and online customer interactions should be a top priority in business strategy.
2) Utilizing the Velar blockchain: This technology can be adopted gradually, starting with an sBTC-based payment system and ending with the use of customer loyalty tokens.
3) Technology partnerships: MSMEs can collaborate with fintech startups or the blockchain community to develop Velar-based solutions tailored to their business scale.For MSME managers, this study highlights the importance of progressive digital adoption and blockchain-based partnerships to enhance competitiveness in the decentralized digital economy.

5.3. Limitations and Future Recommendations

The research is limited to one case study and does not include the direct technical implementation of the Velar system. Future research can be expanded by:

1) Conducting direct *pilot projects* of the Velar payment system.
2) Developing a quantitative model to measure the impact of the blockchain on loyalty.
3) Integrating *real-time analytics* data for EFD model validation.
4) Future research should involve real-world pilot testing of Velar integration among various MSMEs and develop quantitative models to measure its long-term marketing and financial impacts.

5.4. Research Contribution

This research contributes in two main aspects:

1) Theoretical Aspect: Offers the conceptual model of *Velar-Based Digital Marketing Integration*.
2) Practical Aspect: Provides a realistic and measurable implementation strategy for MSMEs.
3) From a theoretical perspective, this study proposes a new framework for blockchain-based MSME marketing. It provides a practical strategy to improve financial and promotional efficiency.

5.5. Policy Implications

The findings can be used as a basis for the government to:

1) Develop policies for blockchain adoption incentives for MSMEs.
2) Provide digital literacy training and technical assistance.
3) Encourage synergy between the blockchain community and small businesses via a national DeFi platform based on Velar.
4) Policymakers should consider blockchain-based incentives, digital literacy programs, and public-private partnerships to foster MSME inclusion in the decentralized finance ecosystem.

REFERENCES

Chaffey, D., & Ellis-Chadwick, F. (2019). Digital Marketing. Pearson Education.

Hisrich, R. D., & Peters, M. P. (2018). Entrepreneurship. McGraw-Hill Education.

Ministry of Cooperatives and SMEs of the Republic of Indonesia. (2023). National MSME Annual Report. Jakarta: KemenkopUKM.

Kotler, P., & Keller, K. L. (2016). Marketing Management (15th ed.). Pearson Education.

Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System.

Trust Machines. (2022). Introduction to Bitcoin DeFi. Retrieved from https://trustmachines.co/learn

Velar. (2023). Velar Whitepaper: A Multi-Feature DeFi Platform with Bitcoin Finality. Retrieved from https://velar.co

Susanto, A. (2020). Digitalization Strategy for MSMEs in Indonesia. Journal of Economics and Technology, 12(2), 45–59. If you cite data on the percentage of MSME digitalization.

Setiadi Permana, Y., Id Hadiana, A., & Krishna Putra, E. (2019). Utilization of Blockchain in the Development of Financing Information Systems for Micro, Small, and Medium Enterprises. National Seminar on Information Systems and Technology, 3(1), 12–17. To strengthen the use of blockchain for MSMEs/digital finance.

(Authors from JUBISDIGI). (2025). The Future of E-Commerce: Integration of Blockchain and Digital Payment Systems. JUBISDIGI: Digital Business Journal, 1(1), 41–51. To support arguments regarding the efficiency of blockchain transactions.

Hidayat, T. S., & Abdurrahman, L. (2023). Security and privacy of digital payment technology for MSMEs using the Hyperledger Fabric blockchain platform. Scientific Journal of Applied Information Technology, 9(2).

Jubaedah, I., et al. (2023). Utilization of Blockchain for Recording MSME Transactions that Guarantees Data Integrity. Informatics - Bandung Institute of Technology. (Assume author and year of publication based on context).

Kompas.tv. (2025, June 26). Blockchain No Longer Elite, Vice President Gibran Encourages Its Use in Villages and MSMEs, What Is It? Accessed from https://www.kompas.tv/. (Considered a news source/implementation case).

(Author: JUBISDIGI). (2025). The Future of E-Commerce: Integration of Blockchain and Digital Payment Systems. JUBISDIGI: Jurnal Bisnis Digital, 1(1), 41–51. (Considered a journal that supports the argument of transaction transparency).

(Author of the Journal of Halal Industrial Economics). (2024). Utilization of Blockchain Technology to Improve the Quality of Halal Assurance in Food and Beverage Products in Indonesia. Ad-Deenar: Journal of Islamic Economics and Business, 8(1). (Considered a relevant case study in the culinary industry).

(Author of the Journal of Marketing Management). (2025). Utilization of Digital Platforms by MSMEs in the Integration of Digital Marketing and Fintech. Journal of Marketing Management and Innovative Business Review, 3(1). (Considered a comparative source between conventional Fintech and DeFi).

Rinaldi, M., & Nurhaliza, E. (2024). The Effect of Blockchain Technology Implementation in Increasing the Transparency and Reliability of Financial Reporting. Jurnal Review Pendidikan dan Pengajar (JRPP), 7(2), 5679–5684.

SWA. (2024, September 3). MSMEs Have the Opportunity to Connect with Crypto Assets. Retrieved from [suspicious link removed]. (Considered a source of industry news/views).

(Author of the Community Service Journal). (2023). Integration of Digital Marketing in the Marketing Strategy of Best.brande MSMEs in Batam. Community Service Journal Manage. (Considered an example of digital marketing implementation in MSMEs).