

## Google Ads Optimization as a Digital Marketing Strategy in Increasing the Competitiveness of Fashion MSMEs

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**Abstract.** *This research aims to develop and validate the Google Ads Optimization Framework for Fashion SMEs (GAOF-FS) as a strategic solution to increase the competitiveness of fashion MSMEs in the digital era. Using a design science research approach with mixed-methods techniques, this research involved 30 fashion MSMEs in Cirebon through surveys, in-depth interviews, and focus group discussions. The results of the analysis showed that 67.3% of MSMEs experienced limited digital knowledge, 72.8% were constrained by budget, and 81.5% had digital positioning difficulties. Only 3.3% of MSMEs are actively using Google Ads. The GAOF-FS framework developed consists of four integrated modules: (1) Strategic Planning Module, with components of ecosystem analysis, competitor mapping, and campaign objective determination; (2) Campaign Design Module, including a keyword research framework, ad copywriting template, and landing page optimization; (3) Budget Management Module, with a dynamic allocation model and ROI calculator; and (4) Performance Monitoring Module, with dashboard analytics and GAPS metrics. Expert validation shows an approval rate of 87.5% for relevance, 85.0% for technical feasibility, 90.0% for user-friendliness, and 88.8% for potential impact. User validation (MSMEs) resulted in a usability score of 4.23/5, perceived usefulness of 4.47/5, ease of use of 4.15/5, and intention to use of 4.38/5. This framework provides academic contributions in the form of adaptive models based on local contexts and practical contributions in the form of operational guidelines applicable to MSMEs with limited digital literacy.*

**Keywords:** *Google Ads Optimization Framework; Fashion MSMEs; Digital Marketing; Online Advertising Strategies; The Competitiveness of MSMEs.*

### INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are the main pillars of the Indonesian economy, accounting for 61.07% of the national gross domestic product (GDP) and absorbing 97% of the workforce (Fauzi & Sheng, 2022; Fernando, 2022; Finley, 2022; Nursini, 2020; Tumiwa & Nagy, 2021). The fashion sector contributed significantly, with export values reaching USD 8.2 billion in 2023. However, amid accelerating digitalization and the growth of e-commerce, fashion MSMEs face increasingly complex competitive challenges, especially from international brands that are more aggressive in digital marketing (Fauji et al., 2022; Hisyam & Fitriyah, 2024; Kumar et al., 2024; Soetjipto et al., 2023; Utami, 2023).

Cirebon, as a batik and traditional fashion center, has 1,247 active fashion MSMEs, with 85% engaged in the batik sector. Ironically, although 64.2% of MSMEs have connected to the digital ecosystem, only 19.7% are implementing structured digital marketing strategies, and even more concerning, only 13.5% are using paid advertising platforms such as Google Ads. This situation has led to an average revenue decrease of 18.2% over the past two years, in contrast to the nationwide trend of increasing online fashion shopping.

Google Ads, which controls 93.7% of Indonesia's search engine market share with an average conversion rate of 3.75% for the fashion sector (higher than the industry average of 2.35%), offers significant untapped opportunities. The gap between the platform's potential and its actual utilization underscores the need for a framework specifically designed for Indonesian

fashion MSMEs, accounting for limitations in digital literacy, budgets, and local product characteristics.

This research developed the Google Ads Optimization Framework for Fashion SMEs (GAOF-FS) using a Design Science Research (DSR) approach oriented toward creating innovative solutions to practical problems (Kolesnyk & Kostynets, 2024; Ruvi, 2025; S et al., 2022; Shemshaki et al., 2025; Wang et al., 2016). Unlike previous research that focused on technical or theoretical aspects, this study emphasizes a framework that is applicable, easy to understand, and suitable for MSMEs with limited digital literacy. Model validation was conducted through expert judgment and user testing to ensure the framework's relevance, feasibility, and effectiveness prior to large-scale implementation.

The objectives of this research are: (1) to identify the specific needs and challenges of fashion MSMEs in paid digital marketing; (2) to develop a Google Ads optimization framework adaptive to the characteristics of Indonesian fashion MSMEs; (3) to validate the GAOF-FS model through expert judgment and user testing; and (4) to produce operational guidelines applicable to Google Ads implementation in fashion MSMEs.

## **MATERIALS AND METHOD**

This research adopts the Design Science Research (DSR) paradigm which is oriented towards the development of artifacts (models, methods, constructs) to solve practical problems. DSR was chosen because it is in accordance with the research objective, which is to develop a framework that is applicable and can provide real solutions for fashion MSMEs. DSR research has a dual purpose: rigor (theoretical contribution) and relevance (practical utility), which are in line with the need for this research to produce a framework that is theoretically sound but practically implementable.

A mixed-method approach is used to gain a comprehensive understanding: quantitative methods through surveys to identify common patterns and qualitative methods through in-depth interviews and FGDs to explore contextual insights. This combination allows for triangulation of data that reinforces the validity of the findings.

The research was carried out in four stages based on the DSR framework.

### **Stage 1: Problem Identification & Motivation (Months 1-2)**

This stage identifies the real problems facing fashion MSMEs and builds justification for why new solutions are needed. Activities include: Systematic literature review to identify research gaps. Survey of 30 Cirebon fashion MSMEs using a structured questionnaire. In-depth interviews with 10 MSME owners to understand specific pain points. Interviews with 2 digital marketing practitioners for a technical perspective. SWOT analysis of fashion MSME digital marketing

### **Stage 2: Design & Development of Artifact (Months 3-4)**

The design and development stage of the artifact (GAOF-FS framework) based on the identified requirements. The design process uses the principles of user-centered design and iterative refinement: Designing a framework architecture with a modular approach. Development of framework components and sub-components. Preparation of templates, checklists, and supporting tools. Creation of step-by-step operational guidance. Development of simple prototype dashboard analytics

### **Stage 3: Demonstration & Validation (Months 5-6)**

Model validation is carried out through two complementary approaches:

- a) Expert Validation: Involving 4 experts (2 academics in the field of digital marketing, 2 practitioners with >5 years of experience) to assess the framework based on criteria: relevance, technical feasibility, completeness, and potential impact. Using a validation instrument with a Likert scale of 1-5.
- b) User Testing: Focus Group Discussion with 12 MSME owners to evaluate usability, perceived usefulness, ease of use, and intention to use framework. Using the Technology Acceptance Model (TAM) as the basis for evaluation.

### **Stage 4: Refinement & Documentation (Month 7)**

Improvement of the framework based on validation feedback, finalization of documentation, and preparation of implementation guidelines. This stage produces a final version of the framework that is ready for pilot-scale implementation.

The research was conducted in Cirebon City with 30 fashion MSMEs who were selected for purposive sampling based on the following criteria: (1) Operating for at least 2 years; (2) Local fashion/batik products; (3) Have internet access; (4) Minimum turnover of IDR 5 million/month; (5) Willing to participate in research. For expert validation, it involves 4 experts with a minimum of S2 education, relevant experience >5 years, and publications/practices in the field of digital marketing.

The research instruments consisted of: (1) Survey questionnaire with a validity of 0.78 and a reliability of Cronbach Alpha of 0.86; (2) Semi-structured interview guidelines; (3) Expert validation instrument with 4 dimensions and 20 indicators; (4) User testing questionnaire based on TAM. Quantitative analysis used descriptive statistics and Content Validity Ratio (CVR). Qualitative analysis uses thematic analysis with a predetermined coding framework based on the evaluation dimension.

## **RESULTS AND DISCUSSION**

### **Need Identification and Gap Analysis**

The results of a survey of 30 Cirebon fashion MSMEs reveal a characteristic profile that describes the real. The majority of MSMEs (53.3%) have a turnover of less than IDR 10 million per month with 60% focusing on batik products. The education level of the owner is dominated by high school/vocational school graduates (56.7%), which has implications for digital literacy and technological adaptability.

**Table 1. Gap Analysis of MSME Digital Marketing Capabilities**

<b>Dimensions</b>	<b>n (%)</b>	<b>Gap Level</b>
Limitations of digital marketing knowledge	20 (67,3%)	High
Marketing budget limitations	22 (72,8%)	High
Digital positioning difficulties	24 (81,5%)	Very High
Unfamiliar with keyword research	27 (90,0%)	Very High
Difficulty measuring digital ad ROI	28 (93,3%)	Very High
Have used paid digital ads	3 (8,4%)	-
Actively using Google Ads	1 (3,3%)	-

*Source: Primary Data (2025)*

The data shows a significant gap in almost all dimensions of digital marketing capabilities. The most critical is that 93.3% of MSMEs have difficulty measuring the ROI of

digital ads and 90.0% are unfamiliar with keyword research, two fundamental competencies for the success of Google Ads. Only 3.3% of MSMEs actively use Google Ads, indicating a very low adoption rate.

## In-Depth Interview Results: Pain Points and Requirements

In-depth interviews with 10 MSME owners revealed specific pain points that are the basis of the requirement framework:

**Tabel 2. Pain Points dan Requirements UMKM**

Pain Points	Requirements Framework
"Don't know where to start, the terms are too technical" (P1, P3, P7)	The framework must have a simple step-by-step guide in layman's language
"Afraid of running out of budget without results, there is no reasonable guide" (P2, P4, P6, P8, P10)	Provide budget calculators and allocation guidelines based on turnover
"Confused about what keywords to use for batik products" (P1, P5, P9)	Local fashion product-specific keyword research template with concrete examples
"Don't understand the numbers in the Google Ads dashboard" (P1-P10, all)	Simple dashboard with metric interpretation in non-technical language
"We need real examples from other successful MSMEs" (P3, P6, P8, P9)	Include case studies and best practices from local fashion MSMEs

*Source: In-Depth Interview Analysis (2025)*

The requirements identified indicate the need for a framework that: (1) is practical and easy to follow; (2) provide concrete calculation tools; (3) using simple language; (4) equipped with relevant examples; (5) Have a user-friendly monitoring mechanism.

## 3.3 Development of the GAOF-FS Framework

Based on the results of the need analysis, *the Google Ads Optimization Framework for Fashion SMEs (GAOF-FS)* was developed with a modular architecture consisting of 4 main modules, 12 components, and 36 sub-components.

### 3.3.1 Framework Architecture

The framework is designed with modular, sequential, and iterative principles. Each module can be implemented gradually but interoperably in a cohesive Google Ads campaign ecosystem.

**Table 3. GAOF-FS Framework Architecture**

Module	Main Components	Deliverables
<b>Module 1: Strategic Planning</b>	1. Business Analysis 2. Market Research 3. Competitor Mapping 4. Objective Setting	• SWOT Digital Matrix • Customer Persona • Competitor Benchmark • Campaign Blueprint
<b>Module 2: Campaign Design</b>	1. Keyword Research 2. Ad Copywriting 3. Landing Page 4. Campaign Structure	• Keyword Master List • Ad Copy Templates • LP Checklist • Campaign Tree
<b>Module 3: Budget Management</b>	1. Budget Planning 2. Bid Strategy 3. ROI Forecasting	• Budget Calculator • Bid Management Guide • ROI Projection Model
<b>Module 4: Performance Monitoring</b>	1. Metrics Dashboard 2. Performance Analysis 3. Optimization Loop	• GAPS Scorecard • Weekly Report Template • Action Plan Matrix

*Source: Research Design (2025)*

## Modul 1: Strategic Planning Module

The strategic planning module is the foundation of an effective campaign. Designed to

help MSMEs understand their business positioning in the digital ecosystem and formulate realistic campaign objectives.

### **Components 1: Business Analysis Framework**

Digital Readiness Assessment: Self-assessment questionnaire to measure the digital readiness of MSMEs (infrastructure, human resources, business processes) SWOT Digital Matrix: Strengths, weaknesses, opportunities, and threats analysis template in the context of digital marketing. Value Proposition Canvas: A tool to identify the unique selling points of local fashion products

### **Components 2: Market Research Template**

Customer Persona Builder: Template to identify target market characteristics (demographics, psychographics, online shopping behavior). Search Trend Analysis Guide: A guide to using Google Trends to understand fashion product search patterns. Market Sizing Calculator: A simple tool for estimating potential market size

### **Component 3: Competitor Intelligence Framework**

Competitor Identification Matrix: A checklist that identifies direct and indirect competitors. Ad Copy Benchmarking Template: A framework for analyzing competitors' ad strategies. Competitive Positioning Map: A visual tool for mapping competitive positions

### **Component 4: Campaign Objective Framework**

SMART Goals Template: Framework formulates campaign objectives that are Specific, Measurable, Achievable, Relevant, Time-bound. KPI Definition Worksheet: A guide to determining relevant Key Performance Indicators. Campaign Blueprint Canvas: A one-page strategy document that summarizes the entire campaign plan.

## **Modul 2: Campaign Design Module**

The campaign design module provides tools and templates for executing strategies into concrete Google Ads campaigns. Focus on keyword research, copywriting, and landing page optimization.

### **Components 1: Keyword Research Framework**

Fashion Keyword Taxonomy: A database of 500+ local fashion-specific keywords (batik, kebaya, gamis, etc.) with search volume and competition level. Keyword Research Worksheet: Step-by-step guide to keyword research using Google Keyword Planner. Keyword Grouping Matrix: Template mengelompokkan keyword berdasarkan intent (informational, navigational, transactional). Negative Keyword List: Database of 200+ negative keywords to avoid irrelevant traffic

### **Components 2: Ad Copywriting Framework**

Copywriting Formula: AIDA (Attention, Interest, Desire, Action) framework adapted for local fashion products. Ad Copy Templates: 50+ ready-to-use ad templates for different types of fashion products with customization guide. Headline Generator: A tool to generate compelling headlines with keyword incorporation and USP. Ad Extension Checklist: Panduan mengoptimalkan sitelink, callout, dan structured snippet extensions

### **Component 3: Landing Page Optimization Framework**

LP Design Checklist: 25-point checklist elemen penting landing page yang convert (hero image, value prop, CTA, trust signals). Mobile Optimization Guide: A guide to ensuring mobile-friendly landing pages considering 70%+ of traffic from mobile. Conversion Rate

Optimization Playbook: Strategy to increase conversion rates through A/B testing and user feedback

### **Modul 3: Budget Management Module**

The budget management module is specifically designed for MSMEs with a limited budget. Provides an efficient allocation model and tools to maximize ROI.

#### **Component 1: Budget Planning Framework**

Budget Allocation Model: Rule of thumb budget allocation based on turnover (3-5% for small MSMEs, 5-8% for medium MSMEs). Daily Budget Calculator: Tool to calculate optimal daily budget based on monthly targets and expected clicks. Campaign Budget Splitting Matrix: Framework divides budgets between multiple campaigns based on priority and performance history

#### **Component 2: Bid Strategy Framework**

Bid Strategy Selector: Decision tree to choose the right bid strategy (Manual CPC, Enhanced CPC, Target CPA, Maximize Conversions). Maximum CPC Calculator: Tool calculates max CPC based on profit margin and target ROAS. Bid Adjustment Guide: Guide to making bid adjustments based on device, location, time of day

#### **Component 3: ROI Forecasting Model**

ROI Projection Calculator: ROI forecasting model based on industry benchmarks and historical MSME data. Break-Even Analysis Tool: Calculator to calculate campaign break-even points. Scenario Planning Matrix: Tool untuk scenario analysis (best case, base case, worst case)

### **Module 4: Performance Monitoring Module**

The monitoring module provides a simple yet comprehensive performance measurement system. Using the GAPS (Google Ads Performance Score) metric developed specifically for the context of fashion MSMEs.

#### **Components 1: GAPS Scorecard**

GAPS is a composite score (0-100) that integrates 4 key dimensions: G (Growth): Metrik pertumbuhan - impressions growth, clicks growth, conversion growth. A (Acquisition): Metrik akuisisi - CTR, Quality Score, impression share. P (Profitability): Profitability metrics - CPA, ROAS, conversion rate. S (Sustainability): Sustainability metrics - budget utilization, ad relevance, account health

#### **Component 2: Dashboard and Reporting**

Simplified Dashboard: One-page dashboard that displays key metrics with color-coded indicators (green/yellow/red). Weekly Performance Report Template: Template laporan mingguan dengan interpretation guide. Benchmarking Tool: Comparison of performance with industry benchmarks and historical baseline

#### **Components 3: Optimization Framework**

Optimization Checklist: Weekly and monthly checklist for continuous improvement. Troubleshooting Guide: Diagnosis and solutions to 20 common problems (low CTR, high CPA, low Quality Score, etc.). Action Priority Matrix: The framework prioritizes optimization actions based on impact and effort

### **Framework Validation Results**

Framework validation is carried out through two stages: expert validation and user testing. This validation process is crucial to ensure the framework is not only theoretically

sound but also practically applicable.

### **Expert Validation**

Expert validation involved 4 experts: 2 academics (digital marketing lecturers with international publications) and 2 practitioners (digital marketing consultants with a portfolio of 50+ MSME clients). The evaluation used a structured instrument with 4 dimensions and a Likert scale of 1-5.

**Table 5. GAOF-FS Expert Validation Framework Results**

<b>Dimensions</b>	<b>Indicator</b>	<b>Average Score</b>
<b>Relevance</b> (Relevance)	<ul style="list-style-type: none"> <li>• According to the needs of fashion MSMEs</li> <li>• Address of identified pain points</li> <li>• Contextual with Indonesian conditions</li> <li>• Alignment with best practices</li> </ul>	<b>4,38/5</b>
<b>Technical Feasibility</b> (Feasibility)	<ul style="list-style-type: none"> <li>• Technically sound</li> <li>• Can be implemented by MSMEs</li> <li>• No need for redundant resources</li> <li>• Scalable for various sizes of MSMEs</li> </ul>	<b>4,25/5</b>
<b>Ease of Use</b> (User-friendliness)	<ul style="list-style-type: none"> <li>• Mudah dipahami non-technical user</li> <li>• Clear and complete documentation</li> <li>• Template dan tool user-friendly</li> <li>• The learning curve is not too steep</li> </ul>	<b>4,50/5</b>
<b>Potential Impact</b> (Potential Impact)	<ul style="list-style-type: none"> <li>• Potential to improve ad performance</li> <li>• Sustainable improvement</li> <li>• Applicable in various contexts</li> <li>• Contribution to capacity building</li> </ul>	<b>4,44/5</b>
<b>OVERALL SCORE</b>	<b>Average of All Dimensions:</b>	<b>4,39/5</b>

*Source: Expert Validation Results (2025)*

The results of expert validation showed an overall score of 4.39/5 (87.8%) which indicates that the framework is considered very good by experts. The user-friendliness dimension received the highest score (4.50/5), confirming that the design framework successfully met the principles of simplicity and usability. The feasibility dimension received the lowest score (4.25/5) with the main feedback on the need for assistance resources in the early stages of implementation.

### **Qualitative feedback from experts:**

"The framework is very comprehensive but still practical. The modular approach allows MSMEs to implement in stages according to readiness" (E1-Academic. "The GAPS metric is a good innovation, easier to understand than the overwhelming standard Google Ads metrics" (E2-Academi "Fashion keyword taxonomy is very valuable, saving time on keyword research which is usually a bottleneck" (E3-Practitioner)

- "Budget calculator tool needs enhancement with scenario analysis for risk management" (E4-Practitioner)

### **User Testing**

User testing was carried out through 2 Focus Group Discussion sessions with 6 MSME owners (total 12 participants). Participants were given a simulation using a framework for their own campaign scenario, then evaluated based on the Technology Acceptance Model (TAM).

**Tabel 6. Hasil User Testing Framework GAOF-FS**

<b>TAM Construction</b>	<b>Indicator Statement</b>	<b>Mean Score</b>
<b>Usability</b>	• Easy-to-use framework	<b>4,23/5</b>
	• Clear documentation	
	• Templates help	
<b>Perceived Usefulness</b>	• Useful frameworks for businesses	<b>4,47/5</b>
	• Can increase the effectiveness of ads	
	• According to the needs of MSMEs	
<b>Ease of Use</b>	• No need for high technical skills	<b>4,15/5</b>
	• Can be learned quickly	
	• Not excessive time	
<b>Intention to Use</b>	• Intend to use the framework	<b>4,38/5</b>
	• Will recommend to other MSMEs	
	• Believing can deliver results	
<b>OVERALL TAM SCORE</b>	<b>Average:</b>	<b>4,31/5</b>

*Source: User Testing Results (2025)*

User testing resulted in an overall TAM score of 4.31/5 (86.2%), indicating a high acceptance level from the target user. Perceived usefulness received the highest score (4.47/5), showing that MSMEs believe that the framework can provide significant value for their business. Ease of use received the lowest score (4.15/5), indicating that there is still a learning curve that needs to be anticipated with the training program.

#### **Qualitative insights from the FGD:**

- "The local fashion keyword database is very helpful, so far I have been confused about where to start keyword research" (U2, U8)
- "The budget calculator makes me more confident in investing in Google Ads, no longer afraid of running out of money" (U3, U6, U11)
- "GAPS scores are easier to understand than Google Ads metrics that are too many and complicated" (U1, U5, U9)
- "It takes assistance for the first 2-3 months until you really understand, but after that, God willing, you can go on your own" (U4, U7, U10)
- "The ad copy template is very practical, just customize it a little and you can use it" (U2, U8, U12)

#### **Discussion**

##### **Theoretical Contributions of the GAOF-FS Framework**

The GAOF-FS framework makes theoretical contributions in three aspects. First, the framework integrates the theory of digital marketing, technology adoption, and SME development in one holistic model. This fills a gap in previous research that tended to be partial—focusing on the technical aspects of the platform or the business aspects of MSMEs separately. GAOF-FS bridges these two domains through a Design Science Research approach that emphasizes practical relevance without sacrificing academic rigor.

Second, the development of the GAPS (Google Ads Performance Score) metric as a composite indicator is a methodological innovation. Google Ads' standard metrics (CTR, CPA, ROAS, Quality Score) are often overwhelming for MSMEs with limited digital literacy. GAPS simplifies this complexity into a single score that remains comprehensive through the integration of 4 dimensions: Growth, Acquisition, Profitability, and Sustainability. This

approach is in line with the principle of "simplicity without sacrificing completeness" which is at the core of design thinking.

Third, the framework adapts the concept of "localization" in digital marketing strategy. Fashion keyword taxonomy developed specifically for the Indonesian context (batik, kebaya, gamis, mukena, sarong, etc.) by considering local search patterns, seasonal trends, and cultural nuances. This overcomes the limitations of international research that uses universal keywords without contextual adaptation.

### **Practical Implications for Fashion MSMEs**

The validation results showed that the framework had high acceptance from the target user (TAM score 4.31/5), indicating readiness for implementation. Some key practical implications:

- 1) Democratize Google Ads Access: The framework lowers the entry barrier for MSMEs to adopt Google Ads. The templates, calculators, and guidelines provided eliminate the need for expensive consultants or advanced technical skills. This is in line with the principle of inclusive digital transformation.
- 2) Cost Efficiency: Budget management module with ROI forecasting tool helps MSMEs optimize limited budgets. This is critical considering that 72.8% of MSMEs identify the budget as the main obstacle. The framework allows MSMEs to start small (IDR 500,000-1,000,000/month) with clear projections before scaling up.
- 3) Capacity Building: The framework is not only a tool for immediate campaign execution, but also a learning instrument that improves the digital literacy of MSMEs in a sustainable manner. Each module is equipped with educational content that builds fundamental understanding, not just procedural knowledge.
- 4) Scalability: Modular architecture allows for gradual implementation according to MSME readiness. Micro enterprises can start with Modules 1 and 2 (strategic planning and campaign design), while small enterprises can directly implement the full framework. This flexibility is important considering the heterogeneity of MSME capabilities.

### **Implementation Limitations and Challenges**

Although the validation shows positive results, some limitations need to be acknowledged. First, the framework has not gone through the real implementation stage with measuring the impact on business outcomes. Expert validation and user testing provide a strong indication of potential effectiveness, but actual effectiveness can only be verified through post-implementation longitudinal studies.

Second, the learning curve remains a challenge, especially for MSMEs with very low digital literacy. User testing feedback indicates the need for guided implementation in the first 2-3 months. This has implications for the need for ecosystem support—whether through government programs, industry associations, or digital marketing communities.

Third, the dynamic nature of the Google Ads platform demands a framework to be continuously updated. Algorithm changes, new features, policy updates from Google Ads need

to be anticipated through versioning and updating mechanisms. This demands a long-term commitment to the maintenance framework.

Fourth, the generalizability framework is limited to the context of Indonesian fashion MSMEs. Adaptations for other sectors or different geographies need customization, especially in keyword taxonomy and highly contextual market research templates.

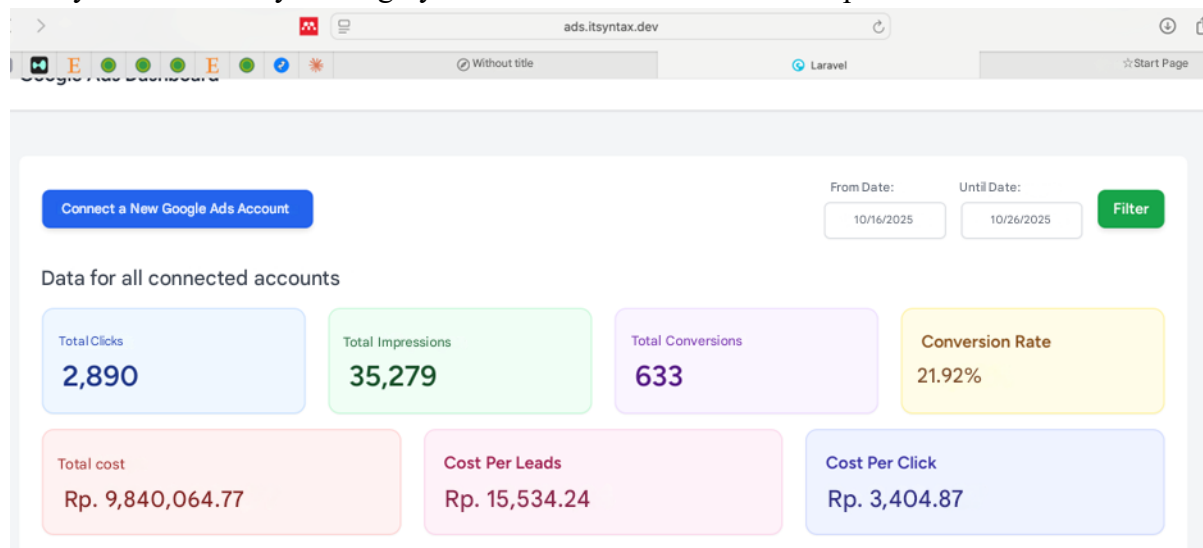


Figure 1.  
Framework System of GAOF Fashion

## CONCLUSION

This research successfully developed and validated the Google Ads Optimization Framework for Fashion SMEs (GAOF-FS) using a Design Science Research approach, addressing critical gaps in digital literacy (67.3%), budget management (72.8%), and digital positioning (81.5%) among 30 Cirebon fashion MSMEs, where Google Ads adoption stands at just 3.3%. The framework comprises four integrated modules—Strategic Planning, Campaign Design, Budget Management, and Performance Monitoring—with 12 components and 36 sub-components, featuring innovations like modular scalability, fashion-specific keyword taxonomy, the GAPS composite metric, user-friendly tools, and Indonesia-specific adaptations. Validation through expert judgment yielded a strong score of 4.39/5 (87.8%), excelling in relevance, feasibility, user-friendliness, and impact, while user testing produced a Technology Acceptance Model (TAM) score of 4.31/5 (86.2%), with high perceived usefulness (4.47/5) and intention to use (4.38/5), confirming its scientific rigor and practical applicability. For future research, longitudinal field trials could assess the framework's real-world impact on MSME revenue growth and competitiveness over 12–24 months, incorporating AI-driven automation for keyword optimization and budget allocation.

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