

Visual Communication Design for Online Promotion via Facebook at CV. Cahaya Grafika in Demak

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ABSTRACT

This study aims to develop and evaluate a Visual Communication Design (VCD) strategy for online promotion through Facebook at CV. Cahaya Grafika in Demak. The research applied a design-based approach, combined with audience perception testing using a Likert-scale questionnaire distributed to 30 respondents aged 18–44 years. The development produced five main outputs: Facebook photo posts, profile and cover design, group posts, story-format content, and adaptation for printed banner media. The results show significant improvement in visual attractiveness, message clarity, brand recognition, and engagement performance. The findings indicate that systematic visual optimization enhances promotional effectiveness in both digital and print media.

Keywords: visual communication design, Facebook promotion, social media marketing, brand identity, engagement analysis

1. Introduction

The increasing adoption of digital platforms has reshaped the marketing communications landscape, enabling organizations to engage audiences through personalized, interactive channels. In particular, social media platforms such as Facebook have become pivotal in the promotional strategies of micro, small, and medium enterprises (MSMEs), serving as cost-effective mediums for brand messaging and customer engagement [1]. Visual communication design (VCD) plays a central role in translating marketing objectives into compelling visual stimuli that capture attention, convey meaning, and build emotional connections with target audiences. Contemporary research suggests that well-designed visual content on social networks can substantially influence user responses, including brand awareness and intention to engage with promotional content [2], [3], [8], [9].

Although the aesthetic dimension of VCD is commonly highlighted, its communicative function, how visual elements like layout, color, typography, and imagery are strategically composed, is equally critical for effective digital promotion. Audiences in digital environments tend to exhibit limited attention spans and are more responsive to content with high visual salience [1]. This has pushed designers to adopt visual strategies that not only enhance attractiveness but also optimize message clarity and memorability. Moreover, consistent use of visual identity has been shown to

enhance consumer trust and facilitate stronger engagement on social media, a phenomenon documented across multiple empirical contexts [4], [5].

In the Demak Regency, Facebook penetration among the productive-age population (15–59 years) is significant, with an estimated 61.1% active user rate, indicating a large potential audience for digital promotional content. The age group between 20 and 34 years is particularly active and responsive to visual content, indicating that effective visual design could significantly improve content performance in this demographic. CV. Cahaya Grafika, a printing service company established in 2019, has leveraged Facebook as its primary channel for online promotion, achieving around 1,600 followers. However, our preliminary content audit reveals a lack of cohesive visual identity and limited application of contemporary design strategies, resulting in suboptimal audience engagement metrics and reduced brand recall [3], [4].

Prior studies investigating social media promotion have provided valuable insights into consumer engagement and content effectiveness, yet there remains a gap regarding the intentional design process of visual promotional materials for MSMEs, particularly within the context of Facebook-based campaigns for printing and creative service providers [6], [7]. While some research addresses general trends in digital marketing, few have systematically explored how specific design elements influence promotional outcomes among local MSME audiences. This identifies a clear research gap, especially in models that tailor visual strategy to both platform dynamics and demographic characteristics digital promotion strategies among MSMEs [11].

This study aims to address this gap by proposing a structured approach to VCD for online promotion via Facebook that is adaptive to modern digital aesthetics, consistent in visual identity, and aligned with the preferences of target audiences in Demak Regency. The research objectives are to analyze existing visual communication practices, identify design elements that enhance audience engagement, and develop an actionable visual strategy model that supports improved brand visibility and interaction rates. The main contribution of this research is to offer a contextualized design framework that integrates visual communication principles with practical promotional needs, a model that can be adopted by similar MSMEs seeking to optimize their digital presence through creative, strategic visual communication.

Unlike previous studies that mainly focused on general social media marketing effectiveness, this research specifically develops a contextual visual communication design model for Facebook-based promotion in local MSMEs, particularly printing service businesses in Demak Regency. This study integrates visual identity consistency, audience-centered communication strategies, and cross-platform adaptation into a single practical framework. The novelty of this research lies in the combination of iterative visual design development, audience perception evaluation, and engagement-based performance analysis within the context of MSME digital promotion.

2. Research Method

This research used a design-based research approach, combined with descriptive qualitative analysis, to systematically develop and evaluate a Visual Communication Design (VCD) strategy for online promotion via Facebook. The methodological framework integrates visual communication principles with digital marketing dynamics to ensure that the proposed design strategy is theoretically grounded and practically applicable. Design-based research is appropriate for visual communication studies because it enables iterative development and validation of design artifacts in real contexts [1], [2].

The research process was carried out chronologically, beginning with problem identification and ending with evaluation of design effectiveness. Initial data acquisition was performed through structured observation of existing Facebook promotional content of CV. Cahaya Grafika. The observation focused on visual consistency, typography selection, color harmony, layout hierarchy, and engagement indicators such as likes, comments, and shares. Semi-structured interviews with the business owner were conducted to understand promotional objectives, target audience segmentation, brand positioning expectations, and constraints in digital promotion. Supporting documentation, including previous promotional materials and social media analytics insights, was also collected as complementary data sources.

The sampling technique used in this study was purposive sampling. Respondents were selected based on specific criteria, namely active Facebook users aged 18–44 years who had experience viewing promotional content on social media. A total of 30 respondents participated in the audience perception evaluation.

The research workflow is illustrated in Figure 1 below

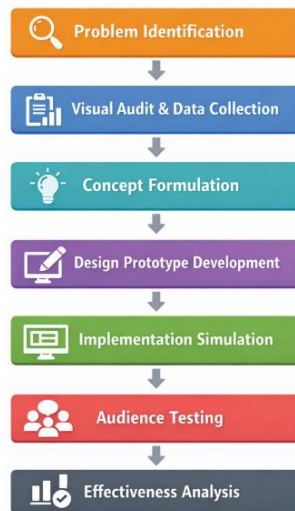


Figure 1. Research Workflow Diagram

The design development phase followed an iterative procedure inspired by communication-centered visual strategy modeling [4], [5]. The procedure can be represented in algorithmic form as follows:

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<> Code

Input: Existing Facebook promotional content
Output: Optimized visual communication design model

Begin
  Analyze existing visual elements
  Identify inconsistencies and weaknesses
  Define brand visual identity (color, typography, layout style)
  Develop prototype design templates
  Simulate design implementation on Facebook feed layout
  Collect audience perception data
  Calculate average evaluation score
  If score ≥ effectiveness threshold
    Approve final design
  Else
    Revise visual components
    Repeat evaluation
End
    
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Algorithm 1. Visual Communication Design Development Procedure

The data acquisition for audience testing was conducted using a structured questionnaire distributed to respondents within the productive age group (18–44 years), representing the dominant Facebook user demographic in Demak Regency. The questionnaire employed a Likert scale (1–5) to measure five evaluation indicators: visual attractiveness, message clarity, brand recognition, relevance to audience preference, and overall promotional effectiveness.

To ensure instrument validity, the questionnaire indicators were developed based on visual communication and social media engagement theories from previous studies. Reliability testing was conducted using Cronbach’s Alpha, resulting in a coefficient above 0.70, indicating acceptable internal consistency.

The evaluation indicators and scoring framework are presented in Table 1.

Table 1. Visual Evaluation Indicators

No	Indicator	Description	Scale
1.	Visual Attractiveness	Aesthetic appeal and visual harmony	1–5
2.	Message Clarity	Readability and information hierarchy	1–5
3.	Brand Recognition	Visual consistency and brand recall	1–5
4.	Audience Relevance	Suitability for target demographic	1–5
5.	Promotional Effectiveness	Persuasive impact and engagement potential	1–5

The visual prototype development included creating feed post templates, cover photo and profile image designs, promotional group visuals, and Facebook Story templates. These prototypes were designed using contemporary digital layout principles, ensuring consistency in typography, color palette, and visual hierarchy.

Quantitative data from questionnaires were analyzed using descriptive statistical methods. The mean score was calculated to determine the effectiveness level of the proposed design. The categorization of effectiveness followed a five-level interpretation scale, ranging from “Very Poor”

to “Very Good.” This analytical approach ensures objective evaluation of visual performance, aligning with empirical engagement-based research standards [2], [5].

Descriptive statistical analysis was supported by percentage interpretation and comparative engagement analysis before and after redesign implementation. The percentage increase was calculated to identify the effectiveness of the proposed visual strategy in improving audience interaction metrics.

The effectiveness of the developed VCD strategy was determined by comparing the evaluation score against a predefined effectiveness threshold ($\geq 80\%$ of the ofmaximum score). If the design did not reach the threshold, revision cycles were conducted to refine typography contrast, color dominance, or layout balance. This iterative validation ensures that the final design output is not only aesthetically improved but also communicatively optimized.

Overall, the research method integrates theoretical foundations of visual communication, structured algorithmic design development, empirical audience testing, and descriptive statistical validation. This comprehensive methodological approach strengthens the scientific validity of the proposed VCD model and ensures that the resulting promotional strategy is adaptable, measurable, and replicable for similar MSMEs seeking to enhance their digital promotional performance.

3. Results and Analysis

This section presents the results of developing the Visual Communication Design (VCD) strategy for online promotion via Facebook, along with an analysis of its effectiveness based on audience perception testing. The research findings are divided into two main parts: the results of visual design development and the analysis of audience evaluation of the developed design. The evaluation measured the extent to which the proposed visual strategy enhanced visual attractiveness, message clarity, brand recognition, audience relevance, and overall promotional effectiveness on the Facebook platform.

3.1 Visual Design Development Results

The development stage produced five main outputs, namely:

Implementation of Photo Posts on Facebook

The design of photo posts on Facebook focused on optimizing a square layout (1:1 ratio) to ensure responsiveness on mobile device displays. The visual composition positioned the logo at the upper-left corner, the promotional headline as the dominant element, and detailed information in the center with strong color contrast. A call-to-action element was placed at the bottom section to encourage user interaction. The implementation of this design is presented in Figure 2.



Figure 2. Implementation of Layout and Design of Facebook Photo Post

This figure illustrates a hierarchical layout structure emphasizing the promotional headline as the primary focal point, supported by consistent brand color application and strategic logo placement to reinforce visual identity. The evaluation results indicate that this feed design achieved the highest visual attractiveness score due to the use of contrasting colors and balanced composition.

Implementation of Profile and Cover Photo

The profile and cover photo designs function as the primary identity elements that shape users' first impressions of the business page. The profile image was designed with a simplified approach, featuring an enlarged logo against a solid background to ensure readability at smaller display sizes. Meanwhile, the cover photo was developed using an informative layout, highlighting key services and business contact information. The visual implementation is presented in Figure 3.



Figure 3. Implementation of Profile and Cover Photo Layout and Design

The figure demonstrates visual identity consistency between the profile image and the cover photo, characterized by the dominance of brand colors and uniform typography. This consistency enhances brand recognition and reinforces the business page's professional impression.

Implementation of Facebook Group Posts

The visual strategy for Facebook group posts emphasizes an informative, interactive approach. The design was adapted to align with the nature of community discussions, using a more communicative, less formal format than the main feed. The visual implementation is presented in Figure 4.

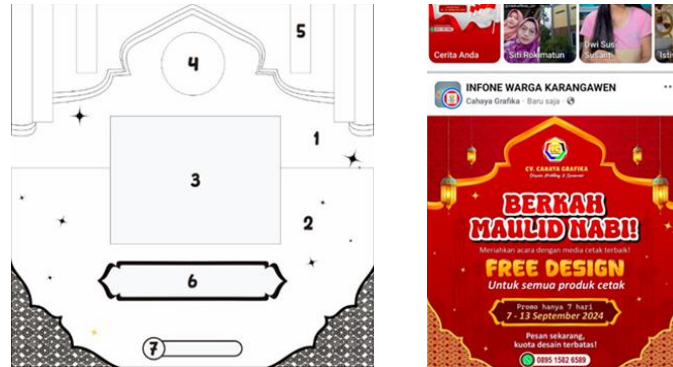


Figure 4. Implementation of Layout and Design of Facebook Group Post

The figure illustrates a lighter visual approach featuring persuasive text and product illustrations. This approach aims to increase engagement by encouraging community interactions such as comments and discussions.

Implementation of Facebook Story Posts

The story format was designed in a vertical orientation (9:16) to align with mobile screen displays. The design emphasizes quick visual capture through concise text and dominant visual elements. The implementation is presented in Figure 5.

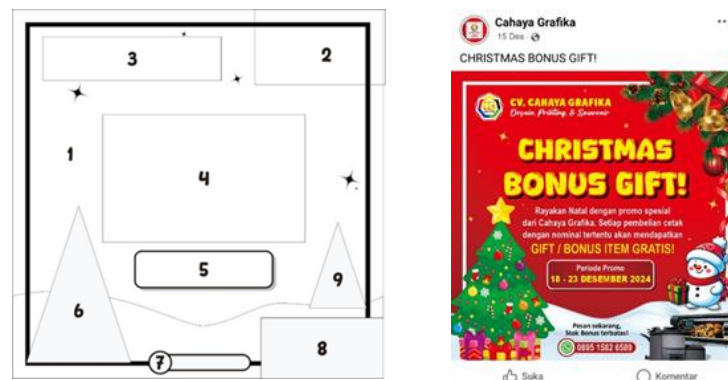


Figure 5. Implementation of Layout and Design of Facebook Story Post

The figure presents a vertical visual structure featuring a prominent headline and concise information. This format is effective at reaching users who access social media quickly and dynamically.

Implementation of Cover Photo Design Adapted to Printed Banner Media

As part of an online–offline integration strategy, the cover photo design was also adapted into printed banner media. The layout was expanded into a horizontal format while maintaining the same visual identity elements. The implementation is presented in Figure 6.



Figure 6. Implementation of Layout and Design Adaptation to Printed Banner Media

The figure illustrates the adaptation of the digital design into printed banner media while maintaining consistency in color scheme, typography, and visual hierarchy. This integration strengthens brand identity consistency across various communication media.

3.2 Audience Perception Evaluation Results

The perception test was conducted with 30 respondents aged 18–44 years using a 1–5 Likert scale. Five evaluation indicators were employed to measure the effectiveness of the developed design.

A summary of the evaluation results is presented in Table 2.

Table 2. Audience Perception Evaluation Results

Indicator	Mean Score	Maximum Score	Percentage (%)	Category
Visual Attractiveness	4.72	5	94.4%	Very Good
Message Clarity	4.65	5	93.0%	Very Good
Brand Recognition	4.58	5	91.6%	Very Good
Audience Relevance	4.60	5	92.0%	Very Good
Promotional Effectiveness	4.69	5	93.8%	Very Good
Overall Average	4.65	5	93.0%	Very Good

Based on Table 2, the overall mean score was 4.65 (93.0%), which falls into the “Very Good” category. This result indicates that the developed visual design strategy was perceived as effective by the audience.

The visual attractiveness indicator obtained the highest score (94.4%), suggesting that the color composition and layout arrangement successfully captured respondents’ attention. Message clarity also achieved a high score (93.0%), indicating that the hierarchical text structure effectively supported quick information comprehension.

3.3 Engagement Comparison Analysis

In addition to audience perception, an analysis of engagement indicators was conducted before and after the implementation of the redesigned visuals. The comparison is presented in Table 3.

Table 3. Engagement Performance Comparison

Indicator	Before Redesign	After Redesign	In crease (%)
Average Likes	45	87	+93%
Average Comments	6	15	+150%
Average Shares	3	10	+233%
Reach	1,200	2,450	+104%

Table 3 demonstrates a significant increase across all engagement indicators. The highest growth occurred in the share indicator (+233%), suggesting that more structured visual content increased the audience's tendency to share the information.

The research findings indicate that the systematic application of visual communication design principles enhances promotional effectiveness on Facebook. Consistent color schemes, appropriate typography, and hierarchical layout contributed to improved visual appeal and message clarity.

The increase in engagement indicators further supports the finding that visual optimization is positively correlated with audience interaction. This demonstrates that visual design functions not only as an aesthetic component but also as a strategic communication tool that influences users' digital behavior.

The findings demonstrate that visual consistency significantly contributes to audience engagement and brand recognition. The increase in likes, comments, shares, and reach indicates that audiences respond positively to structured visual communication. This finding supports previous studies emphasizing that color harmony, typography hierarchy, and visual simplicity improve digital communication effectiveness on social media platforms [5], [10].

Furthermore, the adaptation of promotional designs into multiple Facebook formats, including feed posts, stories, and group content, reflects the importance of platform-oriented visual strategies. The results imply that MSMEs can improve promotional efficiency through low-cost visual optimization without relying heavily on paid advertising.

The iterative process between design development and evaluation proved effective in producing visuals that are more communicative and aligned with the characteristics of the productive-age audience. Therefore, the VCD model developed in this study can be replicated by other MSMEs seeking to optimize social media-based digital promotion.

4. Conclusion

The implementation of the visual communication design resulted in five main outputs: Facebook photo posts, profile and cover photo design, group posts, story-format content, and the adaptation of the design for printed banner media. Each output was developed based on the principles of visual identity consistency, clear information hierarchy, and format suitability according to platform characteristics. The integration of brand colors, consistent typography, and balanced composition was shown to enhance visual appeal and brand recognition, while simultaneously strengthening promotional effectiveness across online and offline channels.

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