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Visual Identity and Digital Marketing of Loka Pere Banana Bioproducts to Empower Adolang Village Creative Economy

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A B S T R A C T

The community service program in Adolang Village, Majene Regency, optimizes the potential of Loka Pere banana as an endemic functional commodity by diversifying products, implementing laboratory-based quality standards, and developing digital marketing. Key interventions include product innovation (Mini Sambusa and Dodol using palm caramel and pandan leaves), proximate-based nutritional standardization, strengthening visual identity, and digital marketing training. Laboratory analysis confirms that the Loka Pere banana is rich in dietary fiber and maintains a stable macronutrient composition, supporting its functional food potential. Evaluation from 33 participants showed very high acceptance (100% positive responses). The program successfully improved product quality, consumer trust, and digital branding capacity, transforming local foods into standardized, competitive functional products. Future efforts should focus on business licensing (NIB, Halal, PIRT) and on cultivating sustainable raw materials to ensure supply continuity.

Contribution to Sustainable Development Goals (SDGs):
SDG 2: Zero Hunger
SDG 8: Decent Work and Economic Growth
SDG 12: Responsible Consumption and Production
SDG 13: Climate Action
SDG 17 : Partnerships for the Goals

1. INTRODUCTION

1.1. Background

The development of rural creative economies utilizing endemic agricultural commodities has become a strategic framework for achieving localized food security and sustainable community empowerment. In West Sulawesi, particularly in Majene Regency, the Loka Pere banana (Musa spp.) is a highly significant yet underutilized plant resource with profound potential as a flagship economic driver. The Loka Pere banana is an endemic biological resource of the Mandar region that holds immense potential for bioproduct-based economic development [1]. Previous molecular and biochemical evaluations indicate that this endemic cultivar possesses remarkable functional food properties, characterized by a high accumulation of resistant starch and dietary fiber that exhibit robust thermal stability during processing [1]. Food biology studies indicate that this variety possesses distinctive physicochemical characteristics of the pulp, bioactive compounds, and natural fibers, making it an ideal raw material for functional food products [1,2] such as *sambusa* and *dodol*. Furthermore, targeted screening of the Loka Pere biomass has revealed substantial profiles of essential bioactive compounds, including specific polyphenols, flavonoids, and

antioxidant attributes, which contribute to its status as a potent health-promoting bioproduct. As functional bioproducts, Loka Pere processed goods offer not only traditional flavors but also health benefits derived from the specific nutritional profile of banana biomass.

However, despite these exceptional inherent biological values, the downstream commercialization of bioproducts in Adolang Village has been significantly hindered by poor product visual identity. Field observations revealed that over 85% of local processed goods in this region are still marketed conventionally, lacking visual identity or standardized packaging. The absence of effective labeling management prevents critical information about the bio-nutritional advantages and functional food properties of the Loka Pere banana from being communicated to consumers. This condition directly undermines product competitiveness in modern markets, given that approximately 90% of consumer purchasing decisions are strongly influenced by packaging aesthetics and label clarity [3]. Implementing a professional visual identity is crucial as a means of building market trust in the biological quality, hygienic standards, and authentic value of traditional processed products[3][4].

Beyond the visual aspect, strengthening the rural creative economy requires the adoption of progressive digital marketing strategies [3]. Previously, the Loka Pere banana was limited to basic commodities such as simple chips or flour, which failed to attract market interest due to monotonous flavor profiles and uncompetitive presentation compared to manufactured goods. Consequently, the economic value of this endemic banana biomass has not been optimally distributed to improve community welfare. Therefore, this community service program implements a strategic step through the product diversification of the Loka Pere banana. This commodity is transformed into innovative products based on Mandar local food wisdom, namely Mini Banana *Sambusa* and Banana *Dodol* featuring premium flavors such as palm caramel and screwpine (*pandan*) leaves. This innovation aims not only to enhance the sensory appeal of the products but also to advance the downstream processing of functional bioproducts by integrating biological nutritional value with modern aesthetics. Furthermore, the introduction of digital literacy enables the community of Adolang Village to expand the market reach of these unique Loka Pere bioproducts. By integrating Mandar cultural narratives and bio-nutritional benefits into digital content, these local products can secure a competitive bargaining position in the global market.

1.2. Objective

The objectives of this community service program are multifaceted and integrated into a single strategic framework. First, it aims to conduct comprehensive community assistance focused on developing strategic branding and visual identity management for endemic Loka Pere banana bioproducts, thereby preserving the unique local genetic resources of West Sulawesi. Furthermore, the program seeks to implement progressive training in digital marketing and creative content management to accelerate downstream commercialization of functional bioproducts and expand market access for rural micro-enterprises. Ultimately, these interconnected initiatives are designed to empower the local creative economy of Adolang Village in a sustainable manner, directly contributing to the United Nations' Sustainable Development Goals; specifically, supporting SDG 2 (Zero Hunger) through local nutritional optimization, SDG 8 (Decent Work and Economic Growth) via rural entrepreneurship, SDG 12 (Responsible Consumption and Production) by utilizing indigenous biomaterial, SDG 13 (Climate Action) through localized supply chain resilience, and SDG 17 (Partnerships for the Goals) via a cross-sectoral collaborative framework

2. METHODS

This community service program was conducted in Adolang Village, Majene Regency, West Sulawesi, actively engaging local youth groups and micro-entrepreneurs as the primary partners. The program employed a systematic, participatory assistance method that integrated food biotechnology expertise with modern marketing management. In contrast to previous initiatives that focused primarily on initial product development, the current program was designed as an advanced stage centered on the standardization and commercialization of bioproducts through the following structured steps :

a. Optimization of Functional Bioproduct Formulation

The initial phase focused on optimizing the formulation of the previously developed mini *sambusa* and Loka Pere banana *dodol*. Optimization was achieved by integrating natural functional additives, namely palm caramel and screwpine (*pandan*) leaves, to establish an optimal balance between premium flavor, textural stability, and a controlled glycemic index. This process aimed to ensure sensory quality consistency while maintaining the biological nutritional profile of the products as signature Mandar functional foods.

b. Quality Standardization via Proximate Analysis

To transition the traditional processing practices into a scientifically validated enterprise, a comprehensive laboratory-based proximate analysis was executed. The evaluation systematically quantified the nutrition of the raw material and optimized Loka Pere banana bioproducts (*sambusa* and *dodol* variants). The biological samples were prepared and evaluated at the laboratorium to determine baseline values of moisture content (oven-drying method), total ash (muffle furnace ignition), crude protein (Kjeldahl digestion), crude fat (Soxhlet extraction), total carbohydrates (by difference), and crude fiber fractions.

Crucially, rather than serving solely as isolated analytical metrics, these empirical laboratory datasets were systematically deployed as the baseline educational framework during the community workshops. The quantitative profiling served a dual operational purpose: first, it established the verifiable functional credibility of the banana biomass, replacing subjective local assumptions with empirical science; second, the numerical output was directly translated into standardized Nutrition Facts Panels for the newly engineered product labels. This methodologically bridges advanced laboratory testing with downstream participatory learning, ensuring that the community partners fully grasped the biochemical rationale behind product shelf-life, hygiene standards, and functional health claims before transitioning to commercial replication..

c. Visual Identity Management Workshop (Labelling)

Following the acquisition of the proximate analysis data, professional assistance was provided to design a cohesive visual identity. This stage encompassed :

- Designing packaging labels that accurately display nutritional facts based on the laboratory results.

- Visualizing health claims and cultural narratives surrounding the endemic Loka Pere banana as a strategy to build consumer trust.
- Educating partners on selecting standard packaging materials to maintain the biological stability and hygiene of traditional processed goods.

d. Digital Marketing Strategy Mentorship

To address limited market reach, this stage provided technical mentorship on using digital platforms as virtual storefronts. Activities included training in product photography, social media optimization, and strategic copywriting to highlight the functional bioproduct value of traditional Mandar products. The goal was to transform local commodities into standardized, iconic Mandar bioproducts and expand their market reach through social media

e. Monitoring and Evaluation

The success of the program was quantified using a 5-point Likert scale questionnaire consisting of 12 statements evaluating product innovation efficacy, branding comprehension, and digital literacy advancement among 33 participants. This evaluation assessed the extent to which integrating scientific research and community service could drive a sustainable, independent creative economy in Adolang Village. The complete questionnaire instrument used to assess the program's effectiveness is presented in Table 1.

Table 1. Questionnaire Instruments for Evaluating Program Effectiveness

Code	Dimension / Evaluation Statements
A. Product Innovation and Functional Bioproduct Dimension	
A1	This program has enhanced my understanding of the Loka Pere banana's potential as a functional bioproduct.
A2	Product diversification (Mini *Sambusa* and flavored *Dodol* variants) increases the economic value of the Loka Pere banana.
A3	The training material provided new insights into maintaining biological nutritional quality during food processing.
A4	Flavor innovations (Palm Caramel & Screwpine) make the products more competitive than conventional alternatives.
B. Visual Identity Management (Labeling) Dimension	
B5	This training helped me understand the importance of visual identity (labels) in building consumer trust.
B6	The new packaging design effectively communicates nutritional facts and Mandar's local wisdom.
B7	I feel capable of designing informative product labels that meet modern market standards.
B8	The professional packaging taught in this workshop creates a more hygienic and premium product impression.
C. Digital Marketing & Creative Economy Dimension	
C9	The digital marketing training improved my skills in managing promotions through social media channels.
C10	I am capable of creating creative content (photos/narratives) that highlights the unique benefits of Mandar products.
C11	Utilizing digital platforms opens up wider market reach opportunities beyond the Adolang Village region.
C12	Overall, this program motivates me to develop an independent, creative economy enterprise.

3. RESULT AND DISCUSSION

a. Formulation Optimization and Participatory Sensory Evaluation Education. The product formulation optimization phase was executed not merely as a technical laboratory procedure, but rather as a collaborative process involving the community of Adolang Village. This initiative also served as an educational medium for local micro-entrepreneurs on the critical importance of evaluating sensory profiles as subjective standards to ensure product quality. Engaging the community in this evaluation aimed to foster self-confidence in the jointly developed commodities. To enhance economic value and market appeal, product diversification was accomplished through two primary innovations :

- Mini Banana *Sambusa*

This innovation transformed a traditional snack into a modern, bite-sized format (Figure 1). It features a Loka Pere banana filling that preserves its natural sweetness without the addition of synthetic sweeteners.

Figure 1. Mini Banana *Sambusa*

- Banana *Dodol*

The development of *dodol* integrated Palm Caramel and Screwpine (*Pandan Wangi*) flavor variants (Figure 2) :

- Application of Palm Caramel
  The selection of local palm sugar (locally known as *golla mamae* from West Sulawesi) aimed to impart a distinctively natural, rich, and aromatic caramel flavor profile while maintaining a controlled glycemic index. This underpins the product's classification as a healthier functional food option compared to those utilizing refined sugar.
- Application of Screwpine (Pandan Wangi)
  The addition of natural screwpine extract was intended to intensify the authentic aroma and enhance the aesthetic value of the resulting bioproducts.

Figure 2. Product diversification of *dodol* through two primary innovations: palm caramel flavor (a) and screwpine (*Pandan Wangi*) flavor (b)

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The outcomes of the formulation optimization and participatory sensory evaluation are detailed below :

- Flavor Variant Diversification

  The optimization yielded premium flavor options specifically palm caramel and screwpine offering a broader selection for potential consumers. The utilization of these natural ingredients ensures that the products retain the intrinsic biological nutritional profile of the endemic Loka Pere banana, thereby qualifying them as premium-taste, signature Mandar functional foods.

- Color Parameter

  Community panelists noted that applying palm caramel gave the dodol a premium, golden-brown appearance. Meanwhile, the mini *sambusa* achieved an ideal golden-yellow hue, reflecting a flawless frying and maturity level.

- Aroma Parameter

  Training regarding the olfactory profile emphasized that the usage of screwpine and palm sugar effectively accentuated the distinctive aromatic characteristics of Mandar bioproducts without relying on synthetic flavoring agents.

- Texture Parameter

  Participants were taught to recognize ideal textural attributes: a dodol that is appropriately chewy yet non-sticky, and a mini sambusa with a crispy outer pastry shell enclosing a soft, tender banana filling.

- Taste Parameter

  Evaluation results demonstrated that the combination of the natural sweetness of the Loka Pere banana and the savory richness of palm caramel created a well-balanced flavor matrix that was highly preferred by the panelists.

Figure 3. Education on formulation optimization for Loka Pere banana bioproducts, showcasing: collaborative formulation optimization of Banana *Dodol* (a1) and Mini Banana *Sambusa* (a2), and community-based sensory evaluation for both variants (b)

Through this sensory profiling education, the community has acquired the capacity to conduct independent quality control. The availability of diverse, sensorially verified flavor variants is expected to significantly augment potential consumer interest [6], serving as a primary asset in strengthening the creative economy competitiveness of functional bioproducts in Adolang Village.

b. Quality Standardization via Proximate Analysis and Specific Nutritional Profile Evaluation

Although product development was carried out in collaboration with the Adolang Village community, the scientific validation phase was rigorously conducted through laboratory testing to ensure data accuracy for consumers (Figure 4). The quantitative results from these laboratory assays were subsequently disseminated back to the community as an educational medium on the critical importance of bioproduct quality standardization [7][8]. Through this dissemination, the community gained a profound understanding of how empirical data derived from Proximate Analysis and Specific Nutritional Profile Evaluation serve as vital instruments for building consumer trust in modern markets.

The strategic parameters disseminated to the community encompassed the following core data sets :

- Proximate Analysis (Macronutrients)

Participants were provided with comprehensive explanations of the measured levels of moisture, ash, crude protein, crude fat, and carbohydrates, which collectively determine product stability and shelf life.

- Dietary Fiber Validation

Laboratory results provided empirical evidence that the biomass of the endemic Loka Pere banana makes a significant dietary fiber contribution, thereby strengthening its identity as a functional food.

- Specific Nutritional Profile Evaluation

The educational session included detailed biochemical components, such as Total Sugar Content to verify the healthy sweetening profile of the palm caramel, alongside Total Energy Content (Calories) and Sodium Content.

Figure 4. Proximate Analysis and Specific Nutritional Profile Evaluation

The translation of quantitative laboratory data into standard consumer packaging assets serves as a critical bridge between empirical food science and community-level economic deployment. To achieve commercial compliance and support public health awareness, specific Nutrition Facts panels were computationally modeled for the three developed bioproduct variations: Mini Banana *Sambusa*. Banana *Dodol* Brown Sugar Variant (*Golla* Mamea), and Banana *Dodol* Pandan Variant (Figure 5).

The *Mini Banana Sambusa* (40g serving; 180 kcal) features a nutrient-dense profile: 10g total fat, 6g protein (10% AKG), and 3.5g dietary fiber (12% AKG). It contains 1.5g of sugar and 100mg of sodium, with zero trans-fat. When mapped against SNI 01-4320-1996 (Traditional Pastry), the sambusa meets all structural and moisture requirements. The 6.20% dry-basis protein concentration resulting from the synergy between wheat gluten and Loka Pere banana, along with 2.68% fiber retention, provides a significant functional advantage over standard potato- or meat-based fillings. This nutritional profile positions the product as a fiber-rich, high-value alternative within the local creative economy.

Hence, both *Pandan* and *Golla Mamea* (brown sugar) *dodol* variants were standardized at a 40g serving size. The *Pandan* variant provides 155 kcal, 1.9g fat, 1.2g protein, and 28.5g carbohydrates (19g sugar). The *Golla Mamea* variant yields 160 kcal and 29.2g carbohydrates (22g sugar), with a higher sodium content (25mg vs 12mg) due to the mineral-rich unrefined sugar. Both variants strictly comply with SNI 01-4294/97-1996 and SNI 01-2986-1992/2015. The lab-validated moisture content (19.45%) remains below the 20% limit, ensuring stability via natural hydrocolloid binding. Furthermore, the protein content (3.15% on a dry basis) exceeds the SNI minimum (1.0%), confirming that the Loka Pere banana serves as a functional protein fortifier compared with conventional rice-flour-based formulations. The *Golla Mamea* variant uses its higher sugar density to increase osmotic pressure, serving as a non-chemical stabilizer (intermediate-moisture *food*) that maintains traditional quality while ensuring safety.

These laboratory data do not merely serve as technical validation but are systematically used to create the nutrition facts panel featured on professional packaging labels [9][10]. The integration of proximate data into publication narratives and marketing strategies is of critical urgency, particularly for reinforcing the product's visual identity framework [11]. By providing valid quantitative metrics for professional labels, consumer confidence in product quality can be significantly enhanced. In the context of the creative economy, the presence of this scientific data elevates the market value of the products; consequently, they are no longer perceived merely as traditional marketplace snacks but are instead transformed into standardized bioproducts. [12]

Furthermore, these data provide empirical raw material for digital marketing, enabling educational content that highlights the bio-nutritional benefits of these traditional Mandar products to health-conscious segments. From an academic perspective, these analytical results constitute a successful model for the commercialization of downstream research, empirically demonstrating that Loka Pere banana product diversification retains its intrinsic biological and nutritional value. Equipped with this scientific foundation, the community of Adolang Village is empowered to market its commodities, effectively shifting the paradigm of local goods into professionally standardized, iconic Mandar functional bioproducts.

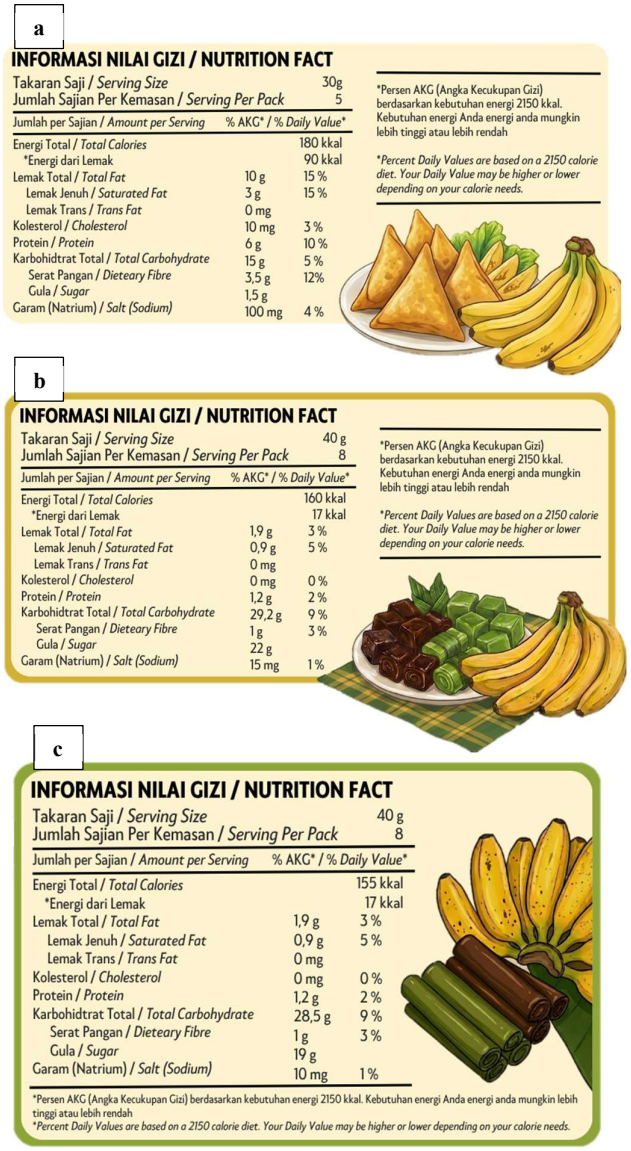

Figure 5. Nutritional facts panels for the three optimized Loka Pere banana-based bioproducts: Mini Banana *Sambusa* (a), Banana *Dodol Golla* Mamea (brown sugar) variant (b), and Banana *Dodol* Pandan variant (c).

c. Visual Identity Management Workshop (Labelling)

Upon acquiring the quantitative data from the proximate analysis and specific nutritional profile assays, the subsequent phase involved transforming these technical laboratory findings into graphic design elements through a visual identity management workshop. This initiative was designed to equip the Adolang Village community with practical skills in developing packaging labels that are not only aesthetically compelling but also highly informative and compliant with modern market standards (Figure 6). The workshop trained the community to seamlessly intertwine the cultural narratives of the endemic Loka Pere banana with verifiable health attributes (Figure 7). By pairing graphical elements that highlight Mandar's cultural identity with functional bioproduct insights, the initiative established a unique and

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competitive visual identity for this flagship West Sulawesi creative economy commodity.

Figure 6. Visual Identity (Labelling) of Mini Banana *Sambusa* (a) and Banana *Dodol* (b)

This workshop successfully driven a paradigm shift within the Adolang Village community, transitioning their focus from conventional, production-centric methods toward professional product presentation management. The ultimate output of this phase was the synthesis of a professional packaging label designed for seamless integration into digital storefronts, projecting an enterprise image of high hygiene, premium quality, and a robust scientific foundation.

d. Digital Marketing Strategy Mentorship

This phase focused on technical mentorship to transform local goods from basic agricultural commodities into iconic, standardized Mandar functional bioproducts with an expanded market presence (Figure 8). The applied approach integrated modern marketing management principles to overcome the partners' previously limited market reach in Adolang Village. The implementation of this digital marketing strategy mentorship yielded several key outcomes :

- Utilization of Digital Platforms as Virtual Storefronts
  The community received direct mentorship in leveraging digital platforms to expand market access beyond the Adolang Village region. This training included optimizing social media accounts to serve as professional digital catalogs and storefronts to showcase the Mini Banana *Sambusa* and Loka Pere Banana *Dodol.*

Figure 7. Technical assistance and capacity building during the visual identity management workshop

- Creative Content Creation Training
  Participants were equipped with product photography skills to generate compelling visual assets that attract consumer interest. These creative contents were strategically designed to highlight the hygienic standards and professional appeal of the newly standardized bioproducts.
- Strategic Marketing Narrative (Copywriting) Techniques
  The mentorship encompassed practical techniques in developing marketing copy that effectively communicates the premium values of these signature Mandar functional bioproducts. The copywriting strategy was structured to foster consumer trust by seamlessly integrating empirical laboratory data with the cultural narrative of the endemic Loka Pere banana.
- Digital Literacy Advancement and Economic Independence
  This intensive mentorship drove a substantial advancement in the community's capacity to manage independent promotional campaigns. Consequently, it provides local micro-entrepreneurs with a viable pathway to capture wider consumer segments and enhances the overall competitiveness of the rural creative economy.

The implementation of these digital marketing strategies represents a pivotal milestone in the product commercialization framework [12], ensuring that the preceding formulation optimization and quality standardization are effectively converted into tangible economic value for the Adolang Village community.

e. Monitoring and Evaluation

The monitoring and evaluation phase was systematically conducted using a Likert-scale questionnaire to measure the efficacy of the program interventions and assess the extent to which the integration of scientific research and community service [14] successfully fostered partner independence in Adolang Village. This comprehensive evaluation was based on the objective responses of 33 training participants in Adolang Village. It encompassed the accumulation of responses across 12 strategic indicators (Table 1), which were categorized into three core dimensions : product innovation and functional bioproducts, visual identity management, and digital marketing adoption for creative economy reinforcement.

Figure 8. Digital storefront development and creative content management training aimed at expanding the market reach of standardized bioproducts

In general, the empirical data showed a strongly positive distribution trend, with partners' cumulative perceptions dominated by Strongly Agree (SA) and Agree (A) responses. Notably, there were zero negative or neutral responses recorded in the Moderately Agree (MA) and Disagree (D) categories.

1) Analysis of Product Innovation and Functional Bioproduct Dimension

Evaluation of the first dimension (Statements 1 to 4) focused on assessing the partners' understanding of the strategic value of standardized processing based on endemic commodities. Based on the acquired data, Statements 1, 2, and 4 exhibited a highly consistent distribution pattern, wherein 32 participants (96.97%) responded with SA and 1 participant (3.03%) responded with A. This indicates that the product diversification into Mini Banana *Sambusa* and Loka Pere Banana *Dodol,* alongside the introduction of premium flavor variants (Palm Caramel and Screwpine), successfully shifted the partners' paradigm, moving from viewing the Loka Pere banana as merely a table fruit to viewing it as a high-value processed good.

Furthermore, responses to Statement 3 yielded an absolute consensus, with 33 participants (100%) selecting SA. This milestone empirically demonstrates that the educational materials on biological nutrient retention methods during functional food processing were fully absorbed by the community (Figure 9). This downstream research commercialization provides a robust scientific foundation for the partners, demonstrating that local food modification does not degrade the intrinsic bioactive compounds within the Loka Pere banana biomass.

2) Analysis of Visual Identity Management (Labelling) Dimension

The second dimension (Statements 5 to 8) evaluated the efficacy of translating technical laboratory knowledge about the strategic role of professional packaging into practical community applications. For Statement 5, an absolute consensus was achieved again, with 33 participants (100%) stating SA which underscores the partners' total awareness of the importance of packaging labels in triggering consumer trust.

Meanwhile, Statements 6 and 8 recorded identical frequencies of 32 participants (96.97%) for SA and 1 participant (3.03%) for Agree (A). This indicates that the developed packaging design successfully transformed technical laboratory data (proximate and micronutrient analyses) into a cohesive visual identity that reflects both the hygienic standards of functional bioproducts and Mandar local wisdom.

In Statement 7 (I feel capable of designing informative product labels that meet modern market standards), a slight variation in responses was observed: 31 participants (93.94%) strongly agreed, and 2 (6.06%) agreed. The slightly higher frequency of "Agree" responses on this indicator accurately reflects the partners' psychological dynamics during the acquisition of new skills. Although the overwhelming majority felt confident, this minor variance signals the need for periodic, sustainable mentorship to ensure the community's long-term independence in updating nutrition facts panel data autonomously [15].

3) Analysis of Digital Marketing and Creative Economy Dimension

The evaluation of the third dimension (Statements 9 to 12) mapped the readiness and sustainability motivation of the partners in entering a science-based digital commerce ecosystem (bio-entrepreneurship). Absolute results were obtained for Statements 9, 11, and 12, in which all respondents (33 participants, 100%) declared "Strongly Agree." These data demonstrate that the mentorship program successfully fostered strong internal motivation among creative economy actors in Adolang Village to operate independently, while broadening their insights into the efficacy of leveraging digital platforms to overcome the geographical boundaries of conventional markets.

Conversely, Statement 10, which measured the technical capacity of the partners to generate creative content (product photography and copywriting techniques), showed the lowest "Strongly Agree" distribution compared to the other indicators, with 30 participants (90.91%) stating "Strongly Agree" and 3 participants (9.09%) choosing "Agree." This distribution pattern is highly logical within innovation diffusion studies, considering that digital content creation demands applied digital literacy skills and repetitive technical habituation (learning-by-doing) [16][17].

Nevertheless, the cumulative positive responses reached 100% in this dimension, demonstrating that the visual identity and digital marketing workshop successfully elevated perceptions of the Adolang Village community's traditional local goods, transforming them into professionally standardized, highly competitive, iconic Mandar bioproducts.

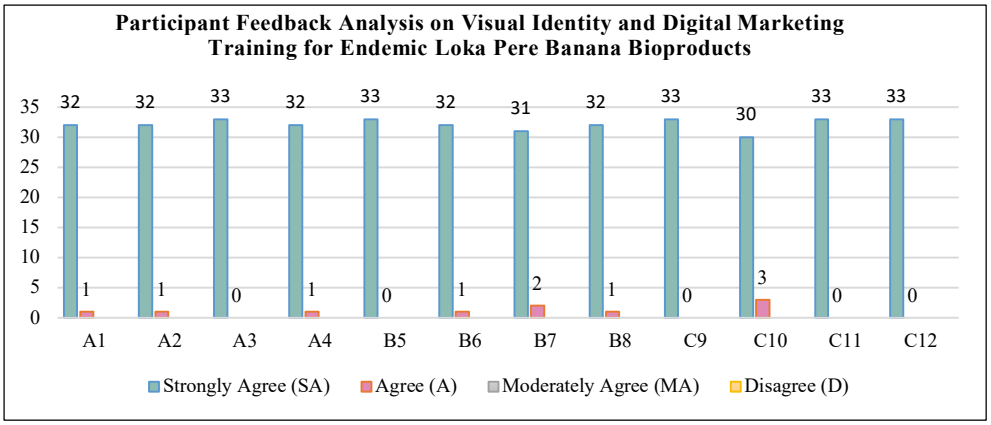

Figure 9. Analytical chart profiling participant feedback on visual identity management and digital marketing adoption of local bioproducts

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4. CONCLUSION

Based on monitoring and evaluation results from 33 participants, this program achieved a 100% positive response (cumulative "Strongly Agree" and "Agree" ratings). This outcome confirms the programmatic effectiveness and partner acceptability, demonstrating that the intervention successfully enhanced the community's capacity, self-confidence, and motivation to manage independent creative economy enterprises. Furthermore, the sustainable implementation of these activities successfully shifted the paradigm of traditional food products (local product repositioning) within the Adolang Village community, transforming them from conventional marketplace snacks into professionally standardized and highly competitive iconic Mandar functional bioproducts.

Reflecting on the operational dynamics and field evaluation results, the long-term sustainability of this creative economy program requires three strategic recommendations. First, periodic mentorship for local youth is imperative to maintain consistency in digital content creation and strategic copywriting across virtual marketing storefronts. Second, subsequent programs must prioritize facilitating formal commercial certifications, such as the Business Identification Number (*Nomor Induk Berusaha* / NIB), Halal certification, and Home Industry Food Registration (*Pangan Industri Rumah Tangga* / PIRT), to accelerate product penetration into modern retail markets. Finally, given that the Loka Pere banana is an endemic floral species, integrating biodiversity conservation programs with semi-intensive cultivation techniques, alongside local farmer groups, is crucial to ensure a continuous and stable supply of biological raw materials as market demand for these bioproducts expands.

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