

THE INFLUENCE OF SERVICE AND DESIGN CO-CREATION ON SALES VOLUME ENHANCEMENT: A CASE STUDY OF ALSA LEMON MSME IN SUKABUMI CITY

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ABSTRACT

This research aims to analyze the influence of co-creation through the dimensions of design (Value Co-design) and service (Value Co-service) on increasing sales volume at UMKMalsa Lemon in Sukabumi City. The research method employed is quantitative, utilizing linear regression analysis with primary data obtained through customer questionnaires. The results indicate that, simultaneously, collaborative product development variables contribute significantly, accounting for 53.4% of the variation in sales volume. Partially, Value Co-design is proven to have a positive and significant influence ($p < 0.05$), making it the dominant factor in attracting purchasing interest through consumer involvement in designing physical product attributes. Meanwhile, Value Co-service acts as a supporting factor in maintaining customer loyalty through service interaction. This study also identifies an external factor of 46.6%, which includes pricing policies and distribution reach as operational supporting infrastructure. The research concludes that the synergy between participatory product innovation and conventional marketing management is a key strategy in boosting the sales performance of agribusiness MSMEs sustainably in the local market.

Key words: Co-design, Co-service, MSMEs, Product Development, Sales Volume.

INTRODUCTION

The development of the Micro, Small, and Medium Enterprises (MSMEs) sector in Indonesia has shown a significant increase, particularly within the health beverage industry utilizing natural ingredients such as lemon (*Citrus limon*). Intensifying market competition demands that business actors shift their focus beyond mere product quality to encompass value creation that actively involves consumers. In this context, the concept of value co-creation emerges as a strategic approach enabling consumers to participate in the value-generation process, both through product design (*co-design*) and service interaction (*co-service*). UMKMalsa Lemon in Sukabumi City represents one of the local businesses implementing this approach to enhance its product sales. Consequently, this study aims to determine the extent to which value *co-design* and value *co-service* influence the increase in sales volume for the aforementioned enterprise.

In Islamic economics perspectives, providing excellent and gentle service to consumers is highly emphasized in the Qur'an and Hadith. It values the principles of speaking kindly (*qaulan karima*), gentleness (*rifqan*), doing good to others (*ihsan*), and delivering the best outcome

(*anyu'tiyahu khayran*). This spiritual approach serves as a moral foundation that strengthens the emotional bond and trust within the *co-service* mechanism, transforming standard transactional marketing into a sustainable, relationship-driven ecosystem.

MATERIALS AND METHODS

This study utilized a descriptive quantitative research design. Primary data were gathered through structured online and offline questionnaires distributed directly to the customers of UMKM Alsa Lemon in Sukabumi City. The sampling technique utilized was purposeful non-probability sampling, ensuring that the respondents were active consumers who had experienced both the physical product and the purchasing services. The structural model evaluated two core independent variables representing the co-creation dimensions: Value Co-design (X1) and Value Co-service (X2), while the dependent variable was Sales Volume (Y). The collected data were processed using Statistical Package for the Social Sciences (SPSS) software. Instrument validity and reliability tests were initially confirmed. The primary statistical analysis consisted of Ordinary Least Squares (OLS) linear regression analysis, partial t-tests, and the Coefficient of Determination (R^2) to interpret the empirical model.

RESULTS AND DISCUSSION

Coefficient of determination (R^2)

To evaluate the capability of the independent variables in explaining the variations in sales volume, the statistical model summary was evaluated. The results of the model fitness and determination test are summarized in Table 1.

Table 1. Results of Coefficient of Determination (R^2)

Model	R	R Square	Adjusted R Square
1	0.731	0.534	0.528

Based on Table 1, the obtained *R Square* value is **0.534**. This empirical evidence confirms that the collaborative value co-creation variables (*Value Co-design* and *Value Co-service*) simultaneously contribute an influential power of **53.4%** toward explaining the variations in sales volume at UMKM Alsa Lemon. Meanwhile, the remaining **46.6%** is explained by external variables outside the formulated model of this study.

Hypothesis testing (partial t-test)

The t-test was executed to observe the individual and partial significance of each independent dimension on the dependent marketing outcome. Table 2 compiles the regression parameters.

Table 2. Results of Hypothesis Testing (Partial t-test)

Variable Dimension	Unstandardized Beta	t-value	Sig.	Empirical Conclusion
Value Co-design (X ₁)	0.591	4.699	0.000	Hypothesis Accepted
Value Co-service (X ₂)	0.181	1.441	0.156	Hypothesis Rejected

The statistical breakdown of the partial test shows distinct results:

1. *Value Co-design (H₁)*: The significance level is $0.000 < 0.05$. Therefore, H₁ is accepted, meaning that *Value Co-design* exerts a highly positive and statistically significant impact on sales volume expansion.
2. *Value Co-service (H₂)*: The significance level is $0.156 > 0.05$. Therefore, H₂ is rejected, indicating that *Value Co-service* partially does not hold a direct significant effect on boosting sales volumes when evaluated separately.

Discussion of the framework and the supporting factor (46.6%)

The dominant coefficient of *Value Co-design* (Beta 0.591) emphasizes that accommodating customer aspirations regarding physical attributes—such as standardizing the 250ml hygienic bottles and redesigning clean visual labeling—directly triggers instant purchasing decisions among Sukabumi consumers. On the contrary, *Value Co-service* statistically acts as an implicit loyalty stabilizer rather than an independent transactional driver.

Adhering to the operational reality of agribusiness, the remaining value of **46.6%** represents the statistical error (ϵ) or external supporting factors that are fundamentally required within this research framework. These external components are identified as competitive pricing mechanisms (*Price*), strategic retail placements (*Place*), and post-pandemic healthy lifestyle shifts within Sukabumi City. In an integrated ecosystem, while the co-creation framework (53.4%) operates as the "**Core Differentiation Engine**", the omitted external variables (46.6%) serve as the mandatory "**Operational Infrastructure**". Without stable pricing and seamless distribution channels, the monetization of innovative participatory designs cannot reach maximum market potential.

CONCLUSION

1. Based on the empirical findings, it can be concluded that product development through *Value Co-design* and *Value Co-service* simultaneously exerts a positive and significant influence on expanding the sales volume at UMKMalsa Lemon, providing a total contribution of 53.4%. This indicates that strategic co-creation involving customers in product layout and service workflows serves as a major driver for market differentiation, while the remaining 46.6% acts as a necessary operational foundation consisting of price competitiveness and local distribution reaches. Therefore, strengthening the synergy

between participatory product innovation and conventional marketing fundamentals is proved to be a highly effective methodology to sustainably escalate the sales performance of small agribusinesses in competitive local markets.

2. Based on these insights, it is practically recommended that UMKMalsa Lemon consistently implements structural customer-feedback channels to capture ongoing design trends. For policy consideration, regional institutions should facilitate technical distribution networks and customer relationship workshops to back up the external operational infrastructures for local MSMEs.

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