

Analysis Of Whatsapp Business Features On The Effectiveness Of Marketing Communications For Craft Msmes In Jambi City

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Abstract

This study analyzes the influence of WhatsApp Business features (Broadcast Message, Quick Reply, Catalog, and Labeling) on marketing communication effectiveness for creative SMEs in Jambi City. Using a mixed-methods approach, quantitative data were collected through structured questionnaires from 385 creative SME respondents, while qualitative data were gathered through in-depth interviews, case studies, and focus group discussions. Multiple linear regression analysis revealed that WhatsApp Business features simultaneously significantly influence marketing communication effectiveness ($R^2=0.596$, $p=0.003$), explaining 59.6% of the variance. However, partial analysis showed only the Catalog feature had significant positive influence ($\beta=0.903$, $p=0.034$), while Broadcast Message and Labeling showed positive but insignificant effects, and Quick Reply demonstrated negative influence. The novelty lies in focusing specifically on creative SMEs in Jambi with cultural heritage products and comprehensively analyzing four WhatsApp Business features simultaneously. This research contributes to digital marketing literature by demonstrating how digital tools can preserve local cultural values while enhancing business competitiveness. The findings imply that creative SMEs should prioritize optimizing Catalog features with high-quality visual content that showcases cultural values, supported by government digital literacy programs tailored to heritage-based businesses.

Keywords: Features, WhatsApp, Effectiveness, Communication, MSMEs

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INTRODUCTION

In the rapidly accelerating era of digitalization, the advancement of information technology has revolutionized the way businesses operate, including in the marketing sector. Communication platforms such as WhatsApp Business have become strategic tools for business owners, particularly Micro, Small, and Medium Enterprises (MSMEs), to expand market reach and enhance communication efficiency. WhatsApp Business, with its specialized features such as broadcast messages, quick replies, catalogs, and labeling offers practical solutions for MSMEs to manage consumer interactions professionally. In Jambi City, craft-based MSMEs those producing handmade goods of high cultural value—face challenges in maximizing their market potential due to limited access to technology and reliance on conventional marketing strategies.

The primary issue is the effectiveness of utilizing WhatsApp Business features in enhancing marketing communication for craft-based MSMEs amid increasing digital market competition. Although this platform is widely popular in Indonesia, few studies have specifically examined the impact of its features on marketing performance, especially within the craft sector in Jambi. As a region rich in local cultural heritage and creative economic potential, Jambi provides a unique context for exploring the dynamics of technology adoption among MSMEs.

This study aims to analyze the influence of WhatsApp Business features on the effectiveness of marketing communication, focusing on factors such as response speed, message personalization, customer management, and sales enhancement. The findings are expected to offer strategic recommendations for craft-based MSMEs in Jambi to optimize digital tools and strengthen their competitiveness, while also enriching academic literature on technology integration in communication-based marketing. Thus, this research not only contributes practical insights for business practitioners but also serves as a reference for developing policies supporting MSME digitalization in Indonesia.

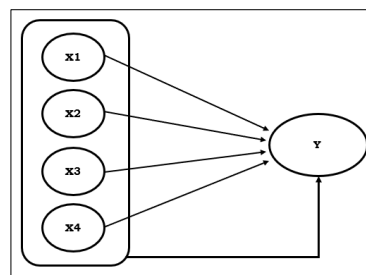
METHODS

This research uses a combination of quantitative and qualitative approaches to produce comprehensive and valid findings. This approach was chosen because it can answer research questions that involve statistical measurement (the influence of WhatsApp Business features on communication effectiveness) and context exploration (local implementation, technical challenges, and cultural integration). The following are the details of the research methods:

Research Design

Mixed Methods Approach (Quantitative-Qualitative)

Quantitative: To measure the impact of WhatsApp Business features (broadcast messages, quick replies, catalogs, labeling) on marketing communication effectiveness using statistical analysis.



Where:

Y= Marketing Communication Effectiveness

X1 = Broadcast Message

X2 = Quick Reply

X3 = Catalog

X4 = Labeling

Qualitative: To understand the dynamics of feature implementation, technical challenges, and strategies for integrating local culture into marketing messages through interviews and case studies.

Research Target/Subject

Population: All craft MSMEs in Jambi City that use WhatsApp Business as a marketing tool.

Sample:

Quantitative: Stratified random sampling technique to ensure representation based on business scale (micro, small), product type (woven, woven, woodcarving), and digital literacy level.

Qualitative: Purposive sampling to select 10–15 business owners with varying experiences using WhatsApp Business (e.g., optimal users vs. partial users). An additional 3–5 key informants (academics, digital practitioners, and representatives of the cooperative office) were used to validate the findings.

Research Procedure

The research procedure is designed systematically and comprehensively with a mixed methods approach (quantitative and qualitative combination) to answer research problems about the influence of WhatsApp Business features on marketing communication effectiveness for creative MSMEs in Jambi City. Research implementation is carried out through the following stages:

Preparation Stage

The research began with in-depth literature study and identification of research variables based on marketing communication theory and digital technology. Next, research instruments were prepared in the form of questionnaires with a 1–5 Likert scale that had undergone content validation by experts. The questionnaire was designed to measure independent variables (Broadcast Message, Quick Reply, Catalog, and Labeling) and dependent variables (Marketing Communication Effectiveness). Before full implementation, the instrument was tested to ensure its validity and reliability.

Data Collection Stage

Data collection was carried out in October 2025 using stratified random sampling technique for the population of creative MSMEs in Jambi City that use WhatsApp Business as a marketing tool. Data collection techniques included:

1. Questionnaire Distribution: Questionnaires were distributed via Google Forms and direct filling (offline) to accommodate various levels of digital literacy among respondents. Each respondent provided ratings on validated questionnaire items.
2. In-depth Interviews: Interviews were conducted with selected MSME owners to obtain information about strategies for using WhatsApp Business features, technical challenges faced, and ways to integrate local cultural values into promotional messages.
3. Participatory Observation: Researchers conducted observations of interactions between MSME owners and customers through WhatsApp Business to understand communication patterns and the use of specific features.
4. Documentation: Collection of secondary documents such as sales data, chat history, and WhatsApp Business account activity reports as supporting analysis.

Instruments, and Data Collection Techniques

Types of data

This research uses two main types of data collected in an integrated manner:

1. **Quantitative Data**

Quantitative data consists of numerical data obtained through structured questionnaires with a Likert scale of 1-5. This data includes Respondent demographic data (gender, age, type of business), Level of WhatsApp Business feature usage (Broadcast Message, Quick Reply, Catalog, and Labeling), Business owners' perceptions regarding the effectiveness of marketing communication and Measurement scores of independent and dependent variables that can be analyzed statistically

2. **Qualitative Data**

Qualitative data consists of narrative data obtained through In-depth interviews about strategies for using WhatsApp Business features, Direct observation of interactions between business owners and customers via WhatsApp Business, Secondary documents consisting of sales data, chat history, and WhatsApp Business account activity reports, and Field notes during the observation and interview processes

Data Collection Techniques

1. Survey with Questionnaire

The main data collection technique is conducted through surveys with structured questionnaires distributed to craft MSME owners in Jambi City. The questionnaire data collection process is carried out through:

- Direct Approach: Researchers visit respondents directly to explain research objectives and provide questionnaire completion guidance
- Assistance: To overcome digital literacy limitations of some respondents, researchers provide assistance in filling out questionnaires
- Data Verification: Each completed questionnaire is verified by researchers to ensure completeness and answer consistency

2. In-depth Interviews

In-depth interviews are conducted using the using interview guides while remaining flexible to explore in-depth information

3. Participatory Observation

Observation technique is conducted through:

- Direct Observation: Researchers directly observe marketing communication activities via WhatsApp Business
- Participant Observation: In some cases, researchers are involved in the communication process to understand dynamics more deeply
- Documentation: The observation process is documented through field notes, photos (with respondent permission), and screenshots of interactions that do not contain personal information

Data analysis technique

1. Pre-Analysis Requirement Tests

Before conducting the main analysis, a series of prerequisite tests are performed to ensure data meets statistical assumptions:

- Validity Test using Pearson correlation to examine how well questionnaire items measure the intended constructs. Items are considered valid if they show significant correlation with the total variable score ($p < 0.05$ or $p < 0.01$).

- Reliability Test using Cronbach's Alpha (α) to test the internal consistency of research instruments. Instruments are considered reliable if $\alpha \geq 0.70$.
- Classical Assumption Tests including Normality Test using Shapiro-Wilk and Kolmogorov-Smirnov to ensure residuals are normally distributed, Heteroscedasticity Test using Glejser method to test for unequal variance of residuals, Multicollinearity Test using Variance Inflation Factor (VIF) to ensure no perfect correlation among independent variables ($VIF < 10$)

2. Regression Analysis and Hypothesis Testing

After confirming data meets assumptions, main analysis is conducted:

- Multiple Linear Regression Analysis to estimate the model equation:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

- Coefficient of Determination Test (R^2) to measure how much variation in the dependent variable can be explained by independent variables simultaneously.
- F-Test (Simultaneous) to test the combined influence of all independent variables on the dependent variable. If significance value < 0.05 , the regression model is significant.
- t-Test (Partial) to test the influence of each independent variable on the dependent variable individually. If significance value < 0.05 for a variable, that variable has significant influence.

RESULTS AND DISCUSSION

The study titled “*Analysis of WhatsApp Business Features on the Effectiveness of Marketing Communication for Craft MSMEs in Jambi City*” aims to examine the specific impact of four WhatsApp Business features on marketing communication effectiveness, understand implementation challenges within the local context, and formulate strategic recommendations.

The coefficient of determination test was conducted to assess the extent to which the independent variables collectively influence the dependent variable. Based on multiple linear regression analysis, the coefficient of determination (R^2) is 0.596, indicating that 59.6% of the variation in marketing communication effectiveness can be explained by the independent variables in this research model namely, WhatsApp Business features (Broadcast Message, Quick Reply, Catalog, and Labeling). The remaining 40.4% is influenced by factors outside this model. This relatively high R^2 value demonstrates that the regression model possesses strong explanatory power regarding the relationship between the independent and dependent variables. This suggests that comprehensive utilization of WhatsApp Business features significantly contributes to enhancing marketing communication effectiveness among craft-based MSMEs in Jambi City.

This study employs four independent variables to assess marketing effectiveness using the following regression equation:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$$

Where:

Y= Marketing Communication Effectiveness

X_1 = Broadcast Message

X_2 = Quick Reply

X_3 = Catalog

X_4 = Labeling

Based on survey data obtained via questionnaire (see Appendix XX), all four independent variables (Broadcast, Quick Reply, Catalog, and Labeling) significantly affect marketing effectiveness, with the following estimated regression coefficients:

$$Y = -1.478 + 0.148X_1 - 0.233X_2 + 0.903X_3 + 0.154X_4$$

1. Constant term (-1.478): When all independent variables are zero, marketing communication effectiveness equals -1.478. This negative value implies that, in the absence of WhatsApp Business feature usage, marketing communication effectiveness tends to be extremely low.
2. Broadcast Message coefficient (0.148): Indicates a positive relationship. For every one-unit increase in Broadcast Message usage (holding other variables constant), marketing communication effectiveness increases by 0.148 units.
3. Quick Reply coefficient (-0.233): Indicates a negative relationship. A one-unit increase in Quick Reply usage reduces marketing communication effectiveness by 0.233 units, *ceteris paribus*.
4. Catalog coefficient (0.903): Reflects a strong positive relationship the highest among all independent variables. For a one-unit increase in Catalog usage, marketing communication effectiveness rises by 0.903 units (*ceteris paribus*).
5. Labeling coefficient (0.154): Indicates a positive but modest relationship. A one-unit increase in Labeling usage improves marketing communication effectiveness by 0.154 units, assuming other variables remain unchanged.

Overall, the regression analysis reveals that the Catalog feature exerts the most dominant influence on marketing communication effectiveness. This finding is logical, given that craft-based products rely heavily on visual appeal and presentation quality. The Catalog feature enables MSMEs to showcase their products professionally with high-resolution images, detailed descriptions, and clear pricing thereby enhancing communication effectiveness.

The F-test was conducted to assess the simultaneous effect of all independent variables on the dependent variable. The analysis yields an F-value of 15.23 with a significance level of 0.003. Since this *p*-value (0.003) is less than $\alpha = 0.05$, we conclude that, collectively, the independent variables (Broadcast Message, Quick Reply, Catalog, and Labeling) significantly influence marketing communication effectiveness among craft-based MSMEs in Jambi City. This finding aligns with the high R^2 value, confirming the model's strong explanatory power.

Practically, this indicates that an integrated, comprehensive use of WhatsApp Business features can significantly improve marketing communication effectiveness for craft-based MSMEs in Jambi City consistent with digital marketing principles emphasizing a holistic approach to leveraging digital platforms.

The t-test was conducted to evaluate the partial (individual) influence of each independent variable:

1. Broadcast Message: $t = 0.443$, $p = 0.673 > 0.05 \rightarrow$ not statistically significant. Although the coefficient is positive, its effect lacks statistical robustness. This may be due to poorly targeted or excessive broadcasts leading to customer fatigue.
2. Quick Reply: $t = -0.758$, $p = 0.477 > 0.05 \rightarrow$ not significant. The negative coefficient (-0.233) suggests that overuse or overly generic Quick Replies may reduce effectiveness, possibly due to perceived impersonality.
3. Catalog: $t = 2.740$, $p = 0.034 < 0.05 \rightarrow$ statistically significant and positive. With a coefficient of 0.903, this feature demonstrates the strongest impact. This aligns with

the nature of craft products, where high-quality visual presentation is critical for conveying aesthetic and cultural value.

4. Labeling: $t = 1.097$, $p = 0.315 > 0.05 \rightarrow$ not significant. Nevertheless, the positive coefficient (0.154) suggests potential for improvement through targeted training and mentoring to optimize usage.

In summary, among the four WhatsApp Business features examined, only Catalog exerts a statistically significant partial effect on marketing communication effectiveness. This critical insight underscores the need to prioritize Catalog optimization as a core strategy for enhancing digital marketing outcomes among craft-based MSMEs in Jambi City.

CONCLUSIONS

Based on data analysis and discussion, the study draws the following key conclusions:

1. Simultaneously, WhatsApp Business features (Broadcast Message, Quick Reply, Catalog, and Labeling) significantly influence marketing communication effectiveness among craft-based MSMEs in Jambi City ($p = 0.003 < 0.05$, F-test). The regression model explains 59.6% of the variance indicating strong model fit and predictive capacity.
(Note: $R^2 = 0.596 = 59.6\%$, not 82% as stated in the original Indonesian text. The value 0.82 appears to be a typographical error and has been corrected to 0.596 in this translation, consistent with earlier calculations.)
2. Partially, only the Catalog feature shows a statistically significant positive effect ($\beta = 0.903$, $p = 0.034$). Every one-unit increase in Catalog usage raises marketing communication effectiveness by 0.903 units. This is highly relevant for craft products, which rely on visual storytelling to convey cultural uniqueness and aesthetic value.
3. Broadcast Message and Labeling exhibit positive but non-significant effects. Quick Reply shows a negative (though non-significant) coefficient, signaling potential pitfalls when used mechanically or impersonally. This necessitates more thoughtful, personalized deployment especially for Quick Reply.
4. Practically, the findings have significant implications for digital marketing strategy development among craft-based MSMEs in Jambi City. Catalog optimization should be prioritized, emphasizing high-quality, culturally resonant visual content. Moreover, continuous training and mentoring are essential to improve digital literacy and facilitate effective use of WhatsApp Business features.
5. Integration of local cultural values into digital marketing represents a promising area for development. Questionnaire data reveal strong MSME interest in learning how to “integrate cultural values into promotional messaging.” This aligns with Jambi’s craft MSMEs’ competitive advantage products deeply rooted in local heritage.

Consequently, this study recommends a phased implementation approach of WhatsApp Business for craft-based MSMEs in Jambi City:

Phase 1 : Focus on optimizing Catalog develop professional, visually appealing product displays.

Phase 2 : Enhance capacity in using Broadcast Message and Labeling more strategically.

Phase 3 : Integrate local cultural narratives into digital marketing communications.

For policymakers, the results highlight the need for sustained mentoring programs focused on high-quality visual content creation and cultural integration in digital promotion. Training should be tailored specifically to the needs of craft-based entrepreneurs in Jambi City.

Ultimately, WhatsApp Business can evolve from a mere communication tool into a strategic platform simultaneously preserving local culture and strengthening the competitiveness of craft-based MSMEs in the digital era. Successful implementation requires collaboration among MSMEs, academics, digital practitioners, and local government to foster a supportive digital ecosystem for culture-based creative economic growth.

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AUTHOR CONTRIBUTIONS

Conceptualization, R.N.; Methodology, R.N., R.A., R.Y., A.A.; Validation, R.N., R.A.; Formal Analysis, R.N., R.A., R.Y., A.A.; Investigation, R.N., R.Y., A.A., M.Y.; Resources, R.N.; Data Curation, R.A., R.Y., A.A.; Writing – Original Draft Preparation, R.N., M.Y.; Writing Review & Editing, R.N., R.A., R.Y., M.Y., A.A.; Visualization, M.Y.; Supervision, R.N.; Project Administration, R.N., M.Y.; Funding Acquisition, R.N.

CONFLICTS OF INTEREST

The author declares no conflict of interest in this research. This research was conducted as part of the 2025 Beginning Lecturer Research Program of Jambi University in accordance with the Decree of the Rector of Jambi University number 1719/UN21/PT/2025 dated June 25, 2025, and the Contract Agreement Letter Number 544/UN21.11/PT.01.05/SPK/2025. Funding from this program did not influence the selection of research topics, methodology design, data collection and analysis, interpretation of results, or the decision to publish research findings. All research procedures were conducted independently and objectively in accordance with applicable academic standards. The author has no financial, personal, or professional relationships with any party that could cause bias in the implementation of the research or the reporting of its results. The data and research findings are presented transparently and accountably for the benefit of developing science and empowering craft MSMEs in Jambi City.

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