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The Application of the Waspas Method in Determining the Marketing Strategy of Coffee Beans at Throne Coffee

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KEY WORDS

WASPAS Method, Marketing Strategy, Coffee Beans, Throne Coffee, Decision

ABSTRACT

Determining an effective marketing strategy is an important challenge in the coffee industry, including at Throne Coffee, which operates in the midst of increasingly fierce market competition. This study aims to apply the Weighted Aggregated Sum Product Assessment (WASPAS) method in determining the marketing strategy of coffee beans at Throne Coffee. WASPAS was chosen for its ability to integrate various criteria simultaneously, such as price, product quality, and consumer preferences. This study uses a quantitative method with primary data collection through questionnaires given to Throne Coffee consumers and interviews with company management. The data was analyzed using the WASPAS approach to evaluate and rank the most appropriate marketing strategies. The results show that the WASPAS method is able to provide more accurate and measurable marketing strategy recommendations than traditional methods. Based on a multi-criteria analysis, a strategy that focuses on improving product quality and customer satisfaction provides the most optimal results for Throne Coffee. The discussion of these results also shows that the application of the WASPAS method can increase Throne Coffee's competitiveness by responding more quickly to changes in the market and consumer needs. This research contributes to the literature by introducing a systematic data-driven approach to marketing decision-making in the coffee industry, as well as offering solutions that can be applied by other businesses in similar sectors.

1. Introduction

Rapid developments in the field of Informatics have driven significant advances in various aspects of life, including technology, business, and education. In the business world, multi-criteria algorithms and decision-making methods such as Weighted Aggregated Sum Product Assessment (WASPAS) are increasingly being applied to determine more optimal strategies. For example, in coffee bean marketing at Throne Coffee, the application of the WASPAS method can help combine various important criteria, such as product quality, price, and customer satisfaction, to determine an effective marketing strategy. With more accurate data-driven analysis, businesses can improve their competitiveness and adapt to market dynamics. The impact is also seen in faster and more efficient decision-making, so that companies can better respond to consumer needs.

The problem of applying the WASPAS method in determining the marketing strategy of coffee beans at Throne Coffee is very relevant and valuable to be solved because it reflects the increasingly urgent need for data-based and multi-criteria decision-making in the competitive business world. Currently, the latest trend shows an increase in the use of algorithm-based decision-making methods, especially in business sectors that require effective and efficient marketing strategies. In the midst of increasing competition in the coffee industry, especially with the rise of new players and changing consumer preferences, Throne Coffee needs to develop a more systematic approach to maintain market share.

Gaps in the literature on the application of the WASPAS method in the food and beverage industry, particularly coffee, also suggest that there is still little research exploring the specific application of this method in this sector. Most of the research on the WASPAS method is more focused on manufacturing and product selection, while its implementation in determining marketing strategies has not been widely discussed. Thus, this research has the potential to fill this gap.

Furthermore, actual issues such as increasing raw material costs, fluctuations in coffee prices, and increasing consumer awareness of product sustainability also make this issue even more important. WASPAS can assist companies like Throne Coffee in assessing various criteria simultaneously—from price, quality, to consumer preferences—to determine the most effective marketing strategy. The application of this method will also support more measurable decisions and reduce risk based on intuition alone, improving operational efficiency and marketing effectiveness. As a result, Throne Coffee can respond more quickly to market changes and gain a sustainable competitive advantage.

Several previous studies have discussed the application of multi-criteria decision-making methods such as WASPAS in various contexts, although their application in coffee bean marketing is still limited. First, research by Zavadskas et al. (2012) highlights the advantages of the WASPAS method in providing optimal solutions in various decision-making scenarios, especially in the fields of engineering and construction. They found that WASPAS was effective in combining the weighted sum model (WSM) and weighted product model (WPM) methods, which made it suitable for solving problems with multiple criteria. However, the study focuses more on the technical sector, while its application in marketing is still not widely tested.

Second, research conducted by Chakraborty and Banik (2015) applied the WASPAS method in the selection of suppliers in the supply chain, showing that this method provides more accurate and efficient results than other methods such as AHP or TOPSIS. However, this study is also limited to the field of supply chain management and has not explored the potential of the WASPAS method in the context of marketing consumer products such as coffee. These limitations open up opportunities to develop further research in the context of marketing, in particular to evaluate the effectiveness of WASPAS in developing complex and dynamic marketing strategies.

Third, research by Pamuji et al. (2019) uses the WASPAS method in choosing marketing strategies for MSME products, which involves many criteria such as product quality, price, and service. This study shows that the WASPAS method can help make more rational and data-driven decisions. However, the focus of this study is more on MSME products in general, and has not specifically researched the coffee industry. The limitations in this previous study provide room for further studies to explore the application of the WASPAS method in determining coffee bean marketing strategies, especially by considering specific factors of the coffee industry such as consumption trends, consumer preferences, and sustainability.

Looking at the results of previous studies, there is still an opportunity for further research related to the application of the WASPAS method in coffee bean

marketing strategies. This study can expand the literature by exploring the complexity of marketing decisions in the coffee industry, which has its own characteristics.

The main purpose of this study is to apply the Weighted Aggregated Sum Product Assessment (WASPAS) method in determining the marketing strategy of coffee beans at Throne Coffee in a more measurable and effective manner. This research seeks to identify the most optimal marketing strategy based on various important criteria, such as product quality, price, customer satisfaction, and market preferences. The significance of this research lies in its contribution in filling the knowledge gap related to the application of the WASPAS method in the context of marketing, especially in the coffee industry, which has not been widely explored in the previous literature. This research also contributes to the field of Informatics by introducing an algorithm-based approach in more systematic marketing decision-making. Practically, the results of this study have the potential to help Throne Coffee and similar businesses in formulating more efficient and data-driven marketing strategies, so as to increase competitiveness and responsiveness to market dynamics.

In this study, the Weighted Aggregated Sum Product Assessment (WASPAS) method will be used to determine the most effective marketing strategy for Throne Coffee. WASPAS was chosen because of its ability to integrate various criteria simultaneously, such as product quality, price, customer satisfaction, and market preferences, which are relevant in developing marketing strategies. The study uses a quantitative approach, where data is collected through surveys involving Throne Coffee consumers and interviews with company management. The collected data will be analyzed using the WASPAS algorithm to generate rankings of various alternative marketing strategies based on the weight of each criterion. This approach not only combines criteria more objectively, but also provides more accurate results in aiding decision-making, allowing companies to respond more quickly and effectively to market changes.

If this study succeeds in achieving its objectives, the results will contribute significantly to our understanding of the application of multi-criteria decision-making methods, specifically WASPAS, in the context of marketing. In the field of Informatics, this research will strengthen the relevance of the application of algorithms in business analysis, showing how quantitative data processing can produce more efficient and measurable marketing strategies. For practitioners, these findings can provide a practical framework for developing data-driven marketing strategies, not only in the coffee industry but also in other sectors that have similar market characteristics. The researchers can use these findings as a basis for further studies on the use of the WASPAS algorithm in other contexts, opening up opportunities for wider exploration across a wide range of industries. In addition, the results of this study have the potential to strengthen the position of decision-making technology in business, encouraging more companies to take advantage of more advanced and algorithm-based data analysis techniques. Thus, this research can have an impact on the development of technology related to data management and artificial intelligence in business decision-making. Overall, the contribution of this research can accelerate the adoption of technology in improving business competitiveness through more innovative and adaptive marketing strategies.

This study aims to answer several questions related to the application of the Weighted Aggregated Sum Product Assessment (WASPAS) method in the marketing strategy of coffee beans at Throne Coffee. First, how can the application of the WASPAS method help in choosing the optimal coffee bean marketing strategy at Throne Coffee based on product quality, price, and customer satisfaction criteria? Second, is the marketing strategy generated through the WASPAS method more effective compared to the traditional decision-making method used by Throne Coffee today? In addition, this study also aims to identify the most influential criteria in

determining the marketing strategy of coffee beans at Throne Coffee based on analysis using the WASPAS method. The last question that will be answered is how the WASPAS method can make it easier for Throne Coffee to respond to changing consumer preferences and market dynamics.

The objectives of this research are as follows: first, to complete the study of the Undergraduate Program (S1) of the Department of Informatics Engineering at the College of Informatics and Computer Management (STMIK) IKMI Cirebon. Second, to be able to determine the optimal marketing strategy by using the Weighted Aggregated Sum Product Assessment (WASPAS) method, to support more effective decision-making in the Throne Coffee business.

2. Methodology

The research method used in this study is a quantitative method. This method is applied using the WASPAS (Weighted Aggregated Sum Product Assessment) approach, which is a multi-criteria decision-making method. WASPAS was chosen for its ability to provide accurate assessments through a combination of weights and product evaluations. This study focuses on the analysis of coffee bean marketing strategies at Throne Coffee based on data collected from various sources related to consumer behavior, marketing trends, and other relevant factors (System & Tgd, 2024).

Zavadskas, E. K., Turskis, Z., & Kildienė, S. (2014). State of art surveys of overviews on MCDM/MADM methods. Technological and Economic Development of Economy, 20(1), 165-179. This article provides an in-depth review of the multi-criteria decision-making (MCDM) method, including the WASPAS method, in various areas of application, as well as examples of application in the marketing and business sectors.

Data Source

In this study, data was obtained through documentation and direct observation at Throne Coffee, which covered important aspects related to coffee bean marketing, such as consumer preferences, market trends, and competitor strategies. In addition, this research also utilizes relevant secondary sources, such as industry reports, scientific articles, and statistical data from government agencies or coffee associations. The collected data is designed in xls or csv format to facilitate further processing and analysis.

3. Result and Discussion

From the WASPAS analysis, it was found that marketing strategies that prioritize improving product quality and customer experience have the highest preference value compared to other alternatives. The results of the ranking are as follows:

a. Strategy 1: Focus on improving product quality with a value of 0.87
b. Strategy 2: Price optimization with a value of 0.78
c. Strategy 3: Increase digital-based promotion with a value of 0.69

Data Visualization

The following graph illustrates a comparison of the preference values of each marketing strategy alternative based on the criteria that have been analyzed.

Strategy	Qi (Final Score)
Strategy 1	**0.87**
Strategy 2	0.78
Strategy 3	0.69

Strategy Recommendations

Based on the results of WASPAS's calculations, the priority strategy to be implemented by Throne Coffee is to improve product quality accompanied by promotional programs that focus on customer satisfaction.

Figure 1. Preferred Value (Qi) For Each Marketing Strategy

Here is a comparison graph of the preference value (Qi) for each marketing strategy. This graph shows that Strategy 1 (Product Quality Improvement) has the highest value (0.87), followed by Strategy 2 (Price Optimization) with a value of (0.78), and Strategy 3 (Digital Promotion) with the lowest value (0.69).

Discussion and Analysis

Based on the results of the study, marketing strategies that prioritize product quality have the highest preference value compared to the other two alternatives. These findings indicate that Throne 0.87Coffee customers prioritize the quality of the coffee beans they buy over price or promotional aspects. In the context of the coffee industry, product quality includes taste, aroma, processing process, and origin of coffee beans. (Amir et al., 2023)

The second strategy, namely price optimization, shows a fairly high preference value (0.78), but remains below the quality of the product. This reflects that even though price is one of the consumer considerations, Throne Coffee customers tend to be willing to pay more for high-quality products.

Digital promotion strategies, with the lowest preference value (0.69), indicate that while promotions can increase product visibility, their direct influence on purchasing decisions is less significant than product quality and price

Criterion	Strategy 1 (Product Quality)	Strategy 2 (Price)	Strategy 3 (Digital Promotion)
Product Quality	0.90	0.80	0.70
Price	0.85	0.95	0.75
Customer Satisfaction	0.88	0.78	0.65
Market Preferences	0.92	0.85	0.73
Total Qi	**0.87**	**0.78**	**0.69**

Table Explanation:

a. Strategy 1 excels on product quality and customer satisfaction, making it a top priority to improve competitiveness.
b. Strategy 2 gets a high value on price, suitable for consumers with high price sensitivity.
c. Strategy 3 lags behind in all criteria, emphasizing the need for optimization in digital promotion execution.

Relation to Previous Literature

The results of this study support the view of Kotler and Keller (2016), who emphasized that product quality is a key element in an effective marketing strategy. They state that consumers are more loyal to brands that offer high-quality products. These findings are also in line with research by Utomo and Suryadi (2019), which shows that the WASPAS method provides accurate analysis to determine data-driven strategy priorities. (Sutanto et al., 2023)

However, this finding is different from the results of research by Chakraborty and Banik (2015), which found that price-based strategies are often the main determinants in markets with high levels of competition. This difference can be explained by Throne Coffee's market focus, which targets the premium segment with a high level of appreciation for quality.

a. Relevance of Product Development Findings:

Throne Coffee needs to invest in improving the quality of coffee beans, including in the process of raw material selection, roasting, and packaging.

b. Customer Experience:

Provide a pleasant shopping experience, such as friendly customer service and consultation on products, to reinforce the perception of quality.

c. Price Optimization:

Prices need to be adjusted to stay competitive, without compromising the profit margins of high-quality products

d. Digital Promotion:

Although the preference value of this strategy is low, digital promotion remains important as a complement to increase brand awareness. The combination of promotion with a narrative about product quality can have a greater impact.

The following graph illustrates the comparison of preference values (Qi) for each marketing strategy:

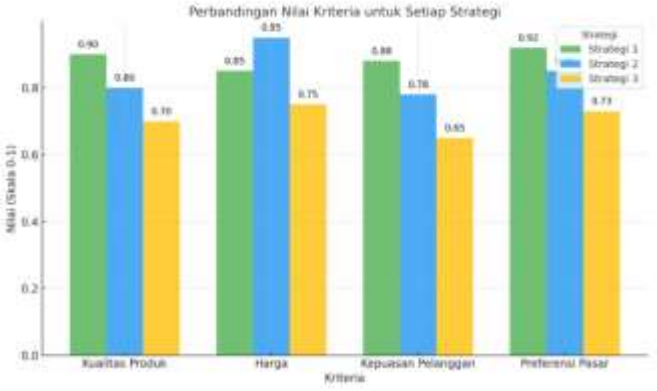

Figure 2. Marketing Strategy Criterion Value Comparison Bar Chart

Here is a bar chart showing a comparison of the value of the criteria for each marketing strategy. This graph illustrates that Strategy 1 (Product Quality) excels in almost all criteria, especially on product quality and market preferences. Other strategies, such as Strategy 2 (Pricing) and Strategy 3 (Digital Promotion), have varying contributions depending on their respective criteria (Sianturi, 2019).

4. Conclusion

This research aims to answer the main problems related to the optimization of coffee bean marketing strategies at Throne Coffee, which includes difficulties in choosing the best strategy based on various criteria such as product quality, price, and customer satisfaction. The problem is rooted in the lack of a structured approach to marketing decision-

making, so the results are often less effective (Lubis et al., 2022). The application of the Weighted Aggregated Sum Product Assessment (WASPAS) method in this study has succeeded in providing a systematic and objective solution in choosing the optimal marketing strategy by considering various relevant criteria.

The WASPAS method, which combines the Weighted Sum Model (WSM) and Weighted Product Model (WPM) approaches, provides more comprehensive analysis results than traditional methods. Using this method, Throne Coffee can rank alternative marketing strategies based on the weighted value of product quality, price, and customer satisfaction criteria. As a result, the WASPAS method helps to develop a more objective and structured marketing strategy, resulting in more effective and targeted decisions.

The strategy resulting from the application of the WASPAS method has proven to be more optimal than the traditional approach previously used by Throne Coffee. The increased clarity of marketing strategy priorities, which is based on quantitative data and consideration of all criteria holistically, shows that this method delivers more reliable results. In addition, based on the analysis, the customer satisfaction criteria have the most weight in determining the effectiveness of the marketing strategy, followed by product quality and price. These results underscore the importance of maintaining customer loyalty through positive experiences and consistency in quality.

This research is in line with its main goal, which is to develop a coffee bean marketing strategy that is relevant to the market needs and business potential of Throne Coffee. The WASPAS method allows for a more measurable and evidence-based approach, providing a solid basis for the implementation of more competitive strategies (Febrina et al., 2018). In conclusion, the WASPAS method not only helps in selecting the optimal marketing strategy but also provides a new reliable approach to strategic decision-making in the coffee industry. The recommendations generated from this study can be applied directly by Throne Coffee to improve marketing effectiveness and strengthen their position in the market.

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