



Proposed Business Strategic Improvement to Accelerate Waste Management Business Unit at Building Materials Company (Case Study at Cement Inc)

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ABSTRACT: The rising environmental concerns and regulatory measures in Indonesia have created new opportunities for the expansion of waste management services in the cement sector, specifically by utilizing thermal technology. The Waste Management Unit (WMU) of Cement Company presents substantial strategic opportunities for expansion and development. After undergoing a merger and acquisition, Cement Inc experienced a transformation and has now become a state-owned firm. This change offers WMU Cement Inc further opportunities for growth and expansion. The objective of this research is to identify the most effective strategy for the Waste Management Business Unit within the Cement Company using the Analytical Hierarchy Process. The study explores three fundamental research question: (1) What is the current situation for WMU Cement Inc in terms of market, money, customer, and organization? (2) What are the obstacles inside the organization and in the external environment that hinder the acceleration of waste management services in Indonesia, resulting in limited value creation for the company? (3) What are the suggested recommendations and strategic choices for the company to enhance its value absorption?

The study used the SWOT (Strengths, Weaknesses, Opportunities, and Threats) and AHP (Analytic Hierarchy Process) framework to perform a comprehensive evaluation and evaluate three strategic options for the waste management division: retaining it within the cement firm, expanding it to the cement group as a whole, or establishing it as an independent entity. The results of this study indicate that the most favorable choice (40.6%) is to establish WMU as a separate entity, which offers greater advantages compared to fully integrating with the parent company (30.9%) and keeping the current business operations (28.4%). By creating WMU as an independent organization, it may effectively avoid market and pricing cannibalization amongst its subsidiaries and optimize operations. WMU Cement Inc possesses the capacity to assume a leading role in waste management services by offering waste solutions to all SIG subsidiary plants and other cement makers, including ITP. The benefits of this method include autonomous operations, targeted management, rapid decision-making, and varied income streams achieved via the cultivation of specialized skills and expertise in waste management. This decision presents a chance to attract targeted investments and collaborations that promote innovation and expansion in waste management.

KEYWORDS: Analytical Hierarchy Process, Cement Industry, Strategic Business, SWOT, Waste Management Services.

INTRODUCTION

Cement Inc is a leading company in the cement industry in Indonesia. In addition, they offer a variety of construction materials and solutions, including waste management services using cement technology. WMU Cement Inc is a dedicated business Unit of Cement Inc to providing innovation and environmentally and socially responsible building solutions. Cement kilns can be utilized as a final alternative for processing some types of waste, such as industrial waste, biomass, and non-recyclable waste.

There are significant waste management challenges in Indonesia, Awareness of Waste Management are growing. UU RI no 32/2009, state that Hazardous Waste (Limbah B3) are undesired product of company process or activity that contained hazardous substance. Any waste that due to its properties, concentration, or volume poses a potential threat to public health and the environment. Individuals and entities generating hazardous waste are required to manage the waste they produce. If they are unable to do so, they must delegate the management to an authorized third party. This is the background why Waste Management Services Business are growth in Indonesia.

In Other Hand, Cement industry in Indonesia is now facing intense competition among several major players. Competitive environment is influenced by significant entry barriers, such as substantial financial investments, adherence to regulations, and the necessity of strong distribution networks



As market are having potential to growth, WMU Cement Inc., a business unit of Cement Inc, need to conduct strategies, the internal and external condition need to be measured, the dependency on the parent company's resources, which might hinder the WMU's ability to scale and adapt to market changes, limit the potential for innovation and expansion in WMU Cement Inc. Business Issues of this Research are to determine the optimal strategic direction for the Waste Management Business Unit within the Cement Company.

LITERATURE REVIEW

Indonesian Regulation for Waste Management Services state that Hazardous Waste (Limbah B3) are undesired product of company process or activity that contained hazardous substance. Any waste that due to its properties, concentration, or volume poses a potential threat to public health and the environment. This regulation mandates comprehensive waste management processes, including reduction, storage, transportation, and disposal. The issuance of permits for hazardous waste management must be publicly announced, ensuring transparency and accountability. Individuals and entities generating hazardous waste are required to manage the waste they produce. If they are unable to do so, they must delegate the management to an authorized third party. This is the background why Waste Management Services Business are growth in Indonesia, because there is a demand to manage and dispose the waste with safe and comply manners. This research want to assess competitiveness of WMU Cement Inc using Porter Five Forces, Customer Value Analysis, Financial Projection, Resources Based View and Business Model Canvas, as an input for SWOT and AHP. SWOT And AHP will decide the Strategic Business Direction for WMU Cement Inc .

A. Porter Five Forces

Integrating Porter Five Forces into this research is for comprehensively understanding the competitive market analysis that WMU Cement Inc. operates within. Porter's framework objectives in assessing competitive intensity, including the threat of new entrants, bargaining power of suppliers and buyers, the threat of substitutes, and industry rivalry (Porter M. E., 1980). By evaluating these forces, WMU Cement Inc. can develop strategies to mitigate competitive threats, leverage its strengths, and identify opportunities for growth and innovation. This detailed competitive analysis enhances the SWOT analysis by providing specific insights into external opportunities and threats, allowing for more actionable and informed strategic planning

Porter's Five Forces (Wu, 2012) can directly explain the key Consideration / Criteria / Attribute for Analytical Hierarchy Process (AHP). Understanding these competitive forces ensures that strategic decisions, whether establishing WMU as a separate entity, full integration with the holding company, or maintaining the status quo, are evaluated with a clear view of market dynamics. This approach not only guides the implementation plans but also ensures alignment with external market conditions, making them robust and effective. By incorporating Porter Five Forces into the conceptual framework, your research achieves a more holistic analysis, ensuring that WMU Cement Inc. can navigate the competitive landscape effectively and make informed strategic decisions.

B. Customer Value Analysis

Customer value is the subjective assessment of the benefits customers gain from a WMU Cement Inc. Customer value in waste management is determined by several elements, such as the effectiveness of waste processing, environmental sustainability, cost efficiency, and the level of service quality. The literature emphasizes the importance of understanding and enhancing customer value to achieve customer satisfaction and loyalty. Customer Value Analysis is a tools to elaborate what key Consideration for Customer Pain Point and Customer Gain Relievers. This key Consideration / Criteria / Attribute for Analytical Hierarchy Process (AHP).

C. Financial Projection

Financial projections in waste management are crucial for companies like Cement Inc, as they provide estimations of future financial performance based on current data, trends, and planned initiatives. These projections are used for budgeting, ensuring efficient allocation of resources by estimating costs related to collection, transportation, processing, and disposal of waste. This tools can be attracting investments from public and private sectors by demonstrating financial viability and profitability, which enhances shareholder value and dividend payouts. Additionally, financial projections ensure long-term sustainability by highlighting the importance of some key consideration / Attribute / Criteria such as operational efficiency, revenue diversification, and effective cash management. Diversifying revenue streams allows the utilization of idle assets and opening new profit channels, while effective cash management ensures liquidity for meeting obligations and investing in growth opportunities, thus correlating significantly with financial sustainability. Overall, financial projections provide a comprehensive roadmap for budgeting, funding, and assessing the



financial viability of waste management initiatives, enabling Cement Inc to achieve and maintain financial sustainability. This tool can be an input to knowing position of WMU Cement inc in term of Financial Analysis.

D. Organization Analysis Resources Based View

The Resource-Based View is a well-known theoretical paradigm in strategic management that emphasizes a firm's internal resources as the main factors influencing performance and competitive advantage. This literature review explores the history, foundational ideas, practical applications, and criticisms of RBV, offering a thorough analysis of its impact on strategic management theory and practice. Wernerfelt (Wernerfelt, 1984) introduced RBV in his 1984 paper "A Resource-Based View of the Firm," and it was later expanded upon by academics like Jay Barney (Barney, 1991) in 1991. RBV is based on the principle that firms possess imperfectly movable and heterogeneously distributed tangible and intangible resources, leading to variations in firm performance. Resources include information, knowledge, organizational procedures, assets, and corporate qualities, while capabilities refer to a company's ability to allocate these resources effectively to achieve desired outcomes. According to RBV, resources must be valuable by seizing opportunities or fending off threats, rare among the company's current and potential competitors, costly and difficult to imitate, and the company must be organized to utilize these resources properly.

E. Business Model Canvas

Yves Pigneur and Alexander Osterwalder created the Business Model Canvas (BMC) in 2010, a strategic management tool offering a visual framework for creating, outlining, and assessing business models. Introduced in their book "Business Model Generation," the BMC divides business models into nine interrelated building blocks: Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships, and Cost Structure. Customer Segments identify the various demographic or organizational groups a firm aims to attract. Value Propositions explain the mix of products and services that create value for a specific market segment. Channels describe how a business interacts with and reaches its customer segments to deliver the value proposition. Customer Relationships detail the types of connections a business establishes with its customers. Revenue Streams represent the income generated from each customer segment. Key Resources identify the essential assets required to execute the business plan successfully. Key Activities outline the critical actions needed for the business model to work. Key Partnerships explain the network of suppliers and collaborators essential for the business strategy. Lastly, Cost Structure outlines all the costs involved in operating the business model.

F. Analytical Hierarchy Process

The Analytical Hierarchy Process (AHP), developed by Thomas L. Saaty in the 1970s, is a systematic decision-making approach designed to manage complex decisions by organizing them into a hierarchical framework of goals, criteria, and alternatives. The primary objectives of AHP are to streamline complicated decisions, rank criteria according to their relative significance, ensure consistency through a consistency check, and facilitate group decision-making by integrating the opinions of various participants. The practical implementation of AHP involves several steps: defining the problem, organizing it hierarchically, making pairwise comparisons, checking for consistency, synthesizing results to establish the overall ranking of alternatives, and analyzing and interpreting results for informed strategic decisions. In this research, AHP can be utilized to resolve complicated decision-making problems involving multiple criteria by providing a structured and methodical framework that improves analysis accuracy and thoroughness. This process includes arranging the study topic hierarchically, performing pairwise comparisons to allocate weights to criteria and sub-criteria, maintaining consistency in judgments, and combining results to identify the most optimal choices. AHP's adaptability makes it effective for diverse decision-making contexts, allowing for the inclusion of input from various stakeholders and resulting in more comprehensive and reliable study outcomes. Consequently, AHP enables in-depth analysis and strategic suggestions, aligning with the goals of well-organized and comprehensive decision analysis.

RESEARCH METHODOLOGY

This Research methodology are using Qualitative Approach using both internal and external analysis with primary and secondary data. Conceptual Framework are designed by using theories and concepts to analyze the condition and Data Collected to answer the Research Question with:

- External Analysis: Porter's Five Forces



- External Analysis: Customer Value Proposition
- Internal Analysis: Business Model Canvas
- Internal Analysis: Resources Based View
- Internal Analysis: Financial Projection
- Decision Analysis: SWOT
- Decision Analysis Analytical Hierarchy Process

First Focus is to measure the External Challenges, based on Marketing and Customer Value Analysis. Internal Challenges based on Organization, to analyze Organization by using Resources Based View, Business Model and Financial Analysis. This Research will use qualitative approach to answer the research questions and objectives,

Table 1. Research Methodology

<i>Method.</i>	<i>Sources</i>	<i>Objectives</i>	<i>Mechanism</i>	<i>Deliverables</i>
Qualitative Approach	Primary Sources	To Create Self-assessment of the company's Business Situation, Create Structured and Semi Structured Interview with Informant	<ul style="list-style-type: none"> • Market Attractiveness • Porter 5 Forces • Customer Value Analysis • Organization Analysis • Business Model 	<ul style="list-style-type: none"> • FGD with Expert Matters (Sales and Marketing team In-Depth interview with Expert Matters (WMU Cement Inc Management) • Structured Interview with Customer Active and Non Active Customer • Semi Structured Interview with Internal Management • Semi Structured Interview with Internal Management
Quantitative Approach	Secondary Data	To Analyse Financial Projection of WMU Cement Inc	<ul style="list-style-type: none"> • Financial Projection 	Financial Attractiveness of WMU Cement Inc

RESULT AND ANALYSIS

A. External Market Analysis Porters Five Forces in Depth Interview Results

Based on the in-depth interview, the waste management market in Indonesia presents various competitive forces that WMU Cement Inc. needs to navigate strategically. **The threat of new entrants** remains **low** due to the high barriers to entry, including brand loyalty, established reputation, strong stakeholder relationships, proven track record, high health, safety, and environmental standards, and competent personnel. WMU Cement Inc. has a strong market position secured by these factors. Conversely, the **bargaining power of suppliers** is **moderate to high**, as WMU relies on specific partners for transportation and waste processing. Maintaining long-term contracts and strategic partnerships is crucial to ensure stable supply and cost-effectiveness. For **buyers**, the power is **medium**, with service innovation and end-to-end solutions being critical in reducing their bargaining power. WMU aims to create long-term contracts and maintain high customer loyalty through key account implementations.

In terms of **substitute products or services**, the threat is **low**. Substitute services often involve high internal treatment costs, and WMU Cement Inc.'s comprehensive waste management solutions, which leave no residue, provide a significant competitive advantage. However, the **rivalry among existing competitors** is **medium**, necessitating continuous service innovation and the

cultivation of strong customer relationships to maintain a competitive edge. The company's proactive approach to improving service levels and fostering innovation is essential in generating revenue and establishing a robust market presence. The overall market attractiveness for WMU Cement Inc. is high, given the significant entry barriers and manageable competitor risks, emphasizing the importance of innovation and sustainable practices in maintaining competitiveness. This figure can be an illustration of Porter's Five Forces Analysis of WMU Cement Inc



Figure 1. WMU Cement Inc Five Forces Analysis

B. External Customer Value Analysis, In-Depth Interview Result

WMU Cement Inc. operates in the highly competitive waste management industry in Indonesia. The company conducted a customer value analysis based on interviews with 43 active users and 80 non-active customers. The study revealed that WMU Cement Inc. has a brand awareness of 72%, just 2% below the market leader. Customer Satisfaction Index showed high of 88.4% in 2020 but dipped to 79.3% in 2021 due to operational challenges and the COVID-19 pandemic. By 2022, the index rebounded to 87.7%, and in 2023 it reached a record high of 93.0%, indicating effective measures taken by the company to address previous issues and enhance service quality. **Key considerations** for customers included **secured brand reputation, the ability to meet waste transportation requests, established business relationships, advanced waste co-processing technology, and safety and regulatory compliance.**

To further improve customer satisfaction and market position, WMU Cement Inc. must address several challenges identified in the study. Customers reported difficulties in obtaining price quotes, poor communication, limited service diversity, inefficiencies in waste transportation requests, and complicated contract and MoU processes. Despite these challenges, the company has several strengths that attract customers, such as advanced technology, high health, safety, and environment standards, a proven track record, commitment to environmental sustainability, competent personnel, and comprehensive waste management solutions. By addressing these challenges and leveraging its strengths, WMU Cement Inc. can enhance customer satisfaction, retain loyalty, and achieve long-term success in the waste management industry.

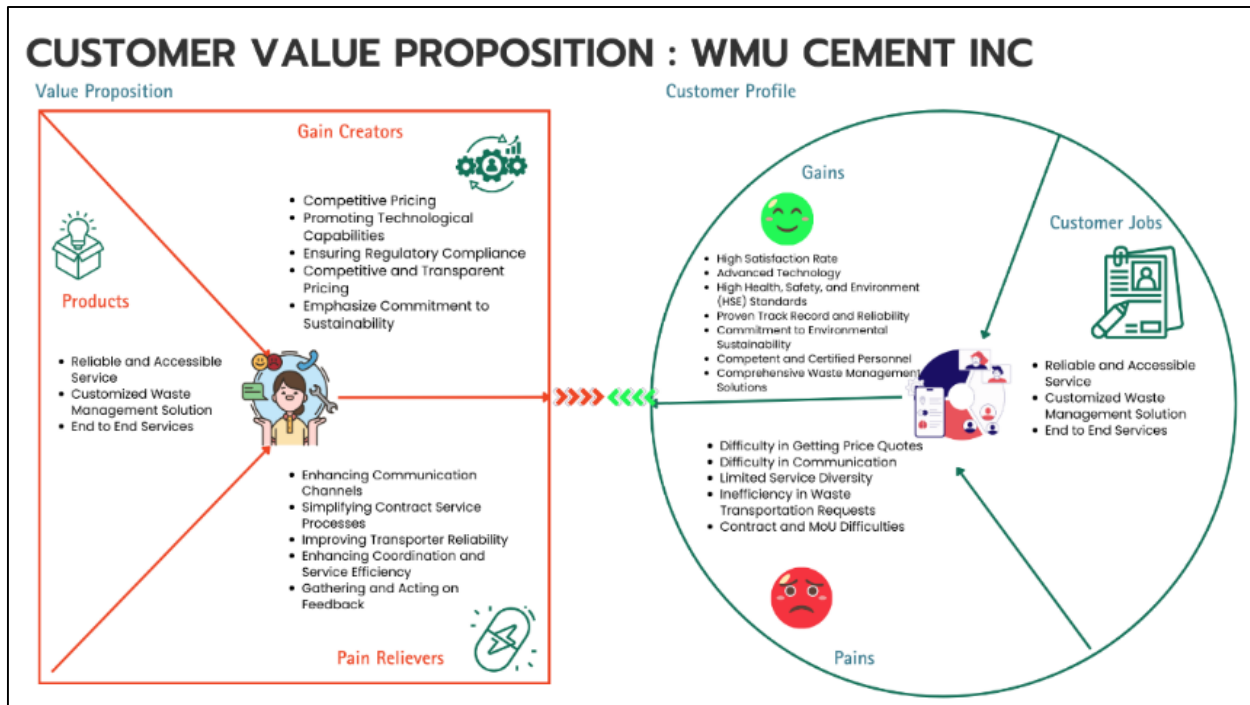


Figure 2 Customer Value Proposition of WMU Cement Inc

C. Internal Business Model Canvas, In-Depth Interview Result

The Business Model Canvas for WMU Cement Inc, developed through extensive desktop research and in-depth interviews, offers a comprehensive visual representation and analysis of the company's innovative strategies and competitive edge. WMU Cement Inc focuses on diverse customer segments, including manufacturing companies, oil and gas companies, FMCG companies, metal treatment companies, pulp and paper companies, power plant companies, mining companies, and government and municipalities. The company's ability to meet the needs and address the pain points of these segments is crucial for revenue generation. The value propositions include efficient waste management, regulatory compliance, commitment to sustainability, reliability and trust, comprehensive solutions, and end-to-end services.

Customer relationships are fostered through dedicated account management, regular reporting, HSE representatives, dedicated personnel on-site, feedback mechanisms, and ongoing support. The primary sales channels for WMU Cement Inc involve direct sales through sales representatives, participation in industry conferences and events, digital outreach via websites and social media, and partnerships with other companies and associations. Key partners include cement companies, government and regulatory bodies, technology providers, transportation partners, and environmental organizations. These partnerships are essential for leveraging strengths and expanding the company's capabilities in waste management.

Key activities at WMU Cement Inc encompass field services, waste transportation, waste collection, compliance management, research and development, laboratory analysis, waste preprocessing, waste storage, waste co-processing, customer relationship management, and waste consultation. The company's key resources include advanced co-processing technology, competent and certified personnel, waste processing facilities, a strong brand reputation, and detailed reporting. The cost structure comprises operational costs, technology and equipment investments, compliance and safety expenses, personnel compensation, and R&D investments. Revenue streams are generated through service fees, disposal fees, consulting services, partnerships and alliances, and sustainability programs. These diverse streams ensure robust financial performance and support sustainable waste management practices.

BUSINESS MODEL CANVAS : WMU CEMENT INC

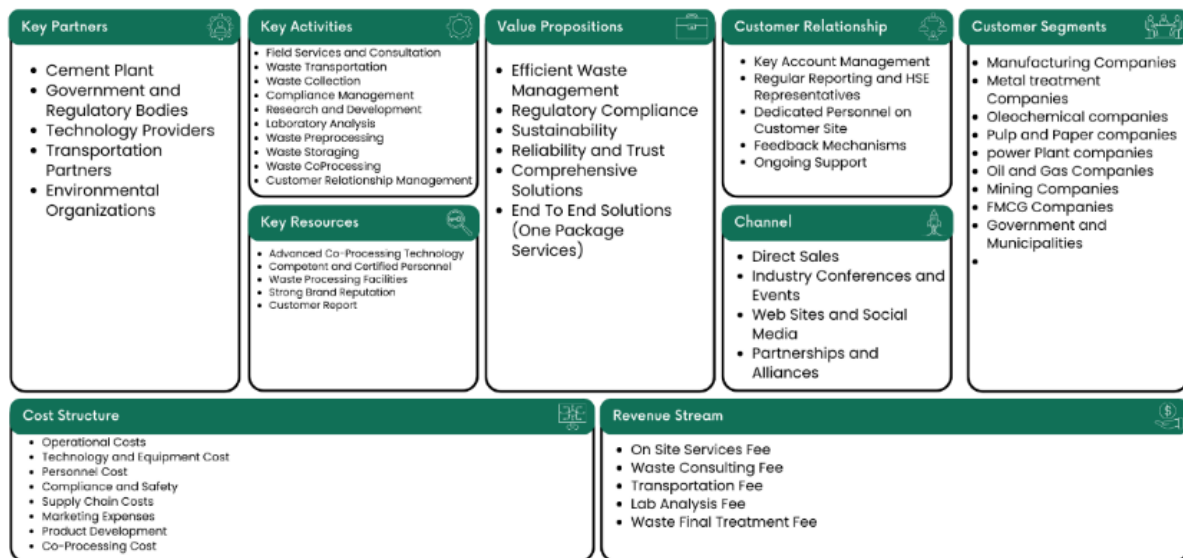


Figure 3. Business Model Canvas for WMU Cement Inc

D. Internal Financial Analysis

The WMU Financial Projection for the period of 2024 to 2028 provides an overview of the forecasted financial performance of WMU Cement Inc., with a specific emphasis on changes in revenue, costs, and profitability. This research examines the essential elements of the projection, offering insights into the financial well-being and strategic orientations of WMU. The core business model of WMU revolves around overseeing trash disposal charges and handling waste generated by various businesses, generating income through disposal fees while supporting other operational businesses (opcos). The projection assumes a steady inflation rate of 2.5%, which influences cost calculations and pricing strategies. Sales projections are based on annualized figures from the first half of 2024, providing a basis for revenue growth estimates.

Financial analysis shows a consistent increase in units sold from 101,000 MT in 2024 to 222,679 MT in 2028, with corresponding revenue growth from 25.25 Bio IDR to 55.67 Bio IDR, reflecting a compound annual growth rate (CAGR) of approximately 22%. Sales are projected to grow significantly from 445.55 Bio IDR in 2024 to 664.99 Bio IDR in 2028, highlighting WMU Cement Inc.'s ability to scale operations. Despite increasing revenues, operating profit remains negative, worsening from (33.86) Bio IDR in 2024 to (91.98) Bio IDR in 2028, raising concerns about operational efficiency and cost management. Although EBITDA shows a negative trend, percentage improvements suggest gradual enhancements in operational margins. Segment analysis indicates strong market demand and effective waste management strategies, with projected revenue growth in hazardous and non-hazardous waste from 112 Bio IDR to 257.32 Bio IDR, and oil and gas services from 125 Bio IDR to 352 Bio IDR. Cost contributions to revenue highlight the importance of efficient workforce management and operational efficiency to maintain profitability. Cash flow analysis shows an improving trend despite negative operating cash flow in 2023 and 2024, underscoring the need for proactive cost management and strategies for operational efficiency and revenue diversification.

E. Internal Organizational Analysis

Based on Michael A. Hitt's 2009 framework, resources, capabilities, and core competencies are fundamental for achieving competitive advantage. WMU Cement Inc. leverages its tangible and intangible resources to create unique value propositions. Tangible resources, such as their advanced waste processing facilities, storage capabilities, and certified laboratories, provide measurable and observable assets that are difficult for competitors to leverage. Intangible resources, including brand reputation, customer relationships, proprietary technology, corporate culture, and organizational knowledge, are embedded in unique patterns, making them challenging



for competitors to imitate. These intangible resources, due to their less visible and more complex nature, serve as superior sources of core competencies.

The heterogeneous strength of WMU Cement Inc. lies in its distinctive and diverse resources and capabilities, which result in differences in performance and competitive advantage. Their advanced co-processing technology, high HSE standards, strong brand reputation, comprehensive waste management solutions, competent personnel, strong customer relationships, commitment to environmental sustainability, and robust financial performance exemplify these strengths. Additionally, the immobility strength emphasizes resources and competencies that are difficult for competitors to obtain or copy, such as established business relationships, a proven track record of reliability, and the advantage of being a state-owned enterprise with locally made services. Through VRIO analysis, WMU Cement Inc.'s resources and capabilities are categorized into competitive parity, temporary competitive advantages, unused competitive advantage, and long-term sustainable competitive advantages. This analysis helps identify areas where the company can maintain or enhance its competitive edge. This Table can show the VRIO result

Table 2. VRIO Analysis

Core Capabilities, Resources, or Programs	Value	Rarity	Imitability	Organization	Competitive Consequences	Performance Implication
P1: Safety And Regulatory Compliance	✓				competitive parity	Average returns
P2: Licensed Transporter	✓				competitive parity	Average returns
P3 : On Time Services	✓				competitive parity	Average returns
P4: Responsiveness	✓	✓			Temporary Competitive Advantages	Average returns to above-average returns
P5 : Ease of Doing Business	✓	✓			Temporary Competitive Advantages	Average returns to above-average returns
P6: Secured Brand Reputation	✓	✓	✓	✓	Long-term /Sustainable competitive advantage	Above-average returns
P7: Knowledgeable and Competent Personnel	✓	✓	✓	✓	Long-term /Sustainable competitive advantage	Above-average returns
P8: High Receiving Capacity	✓	✓	✓	✓	Long-term /Sustainable competitive advantage	Above-average returns
P9: End-to-End Solutions (One Package Service)	✓	✓	✓		Unused Competitive Advantage	Average returns to above-average returns
P10: Compliance with High Standards and Certifications	✓	✓	✓	✓	Long-term /Sustainable competitive advantage	Above-average returns
P11: Customized Service Solutions	✓	✓	✓		Unused Competitive Advantage	Average returns to above-average returns
P12: Compliance and Audit	✓	✓	✓	✓	Long-term /Sustainable competitive advantage	Above-average returns



F. SWOT and AHP Analysis

This section elaborates on the combined use of SWOT (Strengths, Weaknesses, Opportunities, Threats) and AHP (Analytic Hierarchy Process) to provide a robust decision-making framework for WMU Cement Inc. The SWOT analysis identifies the internal and external factors influencing the company, while the AHP method is used to prioritize these factors and evaluate different strategic alternatives. By integrating both methods, the analysis aims to guide WMU Cement Inc. in selecting the optimal strategic direction for their waste management business unit

The SWOT analysis for WMU Cement Inc. reveals significant strengths such as high operational efficiency, advanced technology, and a strong corporate culture. Weaknesses include cash management issues and the need for licensed transporters. Opportunities lie in revenue diversification and creating end-to-end service solutions, while threats include competitive pressures and relationships with suppliers. The SWOT table comprehensively maps these elements based on interview results, highlighting areas for strategic focus.

Table 3. SWOT of WMU Cement Inc

<p>Strength</p> <ul style="list-style-type: none"> • High Operational Efficiency • Waste Processing Facility with Different Location in Indonesia • Completed Storage Facilities • High Receiving Capacity • Strong Corporate Culture and Expertise • Advanced Technology • High Level of Service Quality • High Standart of Safety and Regulatory Compliance • Certified Laboratory • Secured Brand Reputation • Knowledgeable and Competent Personnel • Compliance with High Standards and Certifications • Transparent and Auditability 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Cash Management • Intellectual Property and Technology • Didn't Have Licensed Transporter • Room for Improvement in On Time Services • Room for Improvement level of Responsiveness • Room for Improvement Ease of Doing Business
<p>Opportunity</p> <ul style="list-style-type: none"> • Create Revenue Diversification • High Potential of Market Attractiveness • Established Stakeholder Relationships • Proven Track Record and Reliability • Commitment to Environmental Sustainability • Established Business Relationships with Customer • Create End-to-End Solutions (One Package Service) • Create Customized Service Solutions 	<p>Threats</p> <ul style="list-style-type: none"> • Business Competitiveness with Competitor and New Entrants • Businesss relationship with Supplier

Building on the SWOT analysis, key consideration analysis identifies critical attributes and criteria for WMU Cement Inc. These include operational efficiency, market attractiveness, customer value, financial analysis, and organizational analysis. These factors form the basis for evaluating the company's strategic alternatives. Each attribute is assessed for its relevance and impact on achieving the company's goals. The AHP method is applied to evaluate the strategic alternatives for WMU Cement Inc. using the Expert Choice 11 application. Pairwise comparisons ensure that each attribute/criteria is consistently prioritized. The analysis involves three decision-makers: the AFR GM, AFR Commercial Manager, and AFR Operational and Field Services Manager. They assess the importance of criteria such as operational efficiency and service innovation, determining the best strategic option among full integration, partial integration, and operating as separate entities.

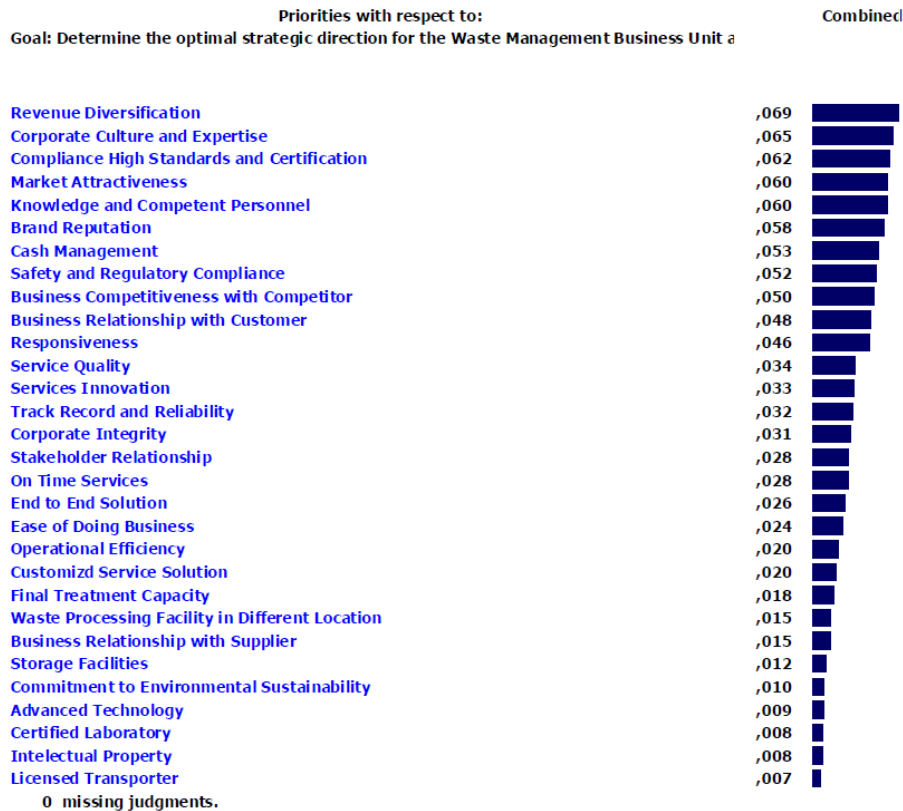


Figure 4. Priorities of Attribute of WMU Cement Inc

The AHP results synthesized show that operating as separate entities is the most preferred alternative, with a weighting of 40.7%. Full integration with the holding company follows with 30.9%, and partial integration is least favored at 28.4%. These findings suggest that WMU Cement Inc. should focus on leveraging its operational strengths and market opportunities through a specialized and flexible approach. This strategy is expected to enhance innovation and efficiency, despite the higher initial setup costs and potential integration challenges. Combining SWOT and AHP provides a comprehensive framework for WMU Cement Inc. to strategically position its waste management business unit. By focusing on identified strengths and opportunities while addressing weaknesses and threats, the company can make informed decisions to optimize its operations and achieve long-term growth.

Alternatives

WMU Separate Entities	,406
Full Integration with Holding Company	,309
Partial Integration (Business As Usual)	,284

Figure 5. Best Alternatives Strategic to Choose



CONCLUSION AND RECOMMENDATION

Table 4. Best Alternatives of WMU Cement Inc

Alternatives	Separate Entities for Waste Management Business Uni	Full Integration with Holding Company	Half Integration WMU Cement Inc (Business As Usual)
PRO	Potential for specialized focus, flexibility, and ability to attract specific investments and partnerships. Independence could drive innovation and operational efficiency	Leverages existing infrastructure, resources, and capabilities of the holding company. Enhances synergies and streamlines operations, reducing costs.	Utilizes existing systems and processes, minimizing disruption. Lower upfront costs and easier to implement in the short term
CONS	Higher initial setup and operational costs, potential challenges in achieving scale and integration with existing cement operations	Possible bureaucratic inefficiencies and slower decision-making processes. Risk of dilution of focus on waste management due to broader corporate priorities	Limited potential for growth and innovation. Continued dependency on the parent company's resources may hinder the unit's ability to scale and adapt to market changes.
DECISION	40.6%	30.9%	28.4%

Based On Kepner Treggoe Analysis, Situation Analysis is to understand context and urgency of the problems, Situation Analysis of This Research are in Indonesia, there are significant waste management challenges, Awareness of Waste Management are growing. As Market are having potential to growth, WMU Cement inc need to conduct strategies, the internal and external condition need to be measured, the dependency on the parent company’s resources, which might hinder the WMU's ability to scale and adapt to market changes, limit the potential for innovation and expansion in WMU Cement Inc. Business Issues of this Research are to determine the optimal strategic direction for the Waste Management Business Unit within the Cement Company.

the recommendations to bridge the identified potential problem analysis are WMU Cement Inc should centralize the Alternative Fuels and Raw materials (AFR) function at the Separate Level. This centralization will harness the expertise and established relationships of the WMU Cement Inc unit, creating a center of excellence in waste management. By avoiding market and price cannibalization among subsidiaries and streamlining operations, WMU Cement Inc can lead the Waste Management services by providing Waste for all of SIG Subsidiary Plant and other Cement Factories (such as ITP, etc). As dedicated separate entities will handle sourcing, processing, and compliance, ensuring uniformity and operational efficiency across all waste management activities. The Advantages of this decision are, WMU Cement inc can have independent operations, WMU Cement Inc can lead to more focused management and agility in decision making. WMU Cement Inc can diverse the revenue by developing specialized capabilities and expertise in waste management. This Decision also can attract specific investment, partnership that can drive innovation and expansion in waste management.

WMU Cement Inc need to create Steering Committee that can focused on this implementation. Some of Potential problems might occurred are this research proposes Urgency Levels is assessed the justification based on the impact, trend and timing.



Table 5. Potential Problem Analysis

POTENTIAL PROBLEM	CONSEQUENCE	POSSIBLE CAUSE	PREVENTIVE ACTION	CONTINGENT ACTION
Resistance to Change	Decreased employee morale, delays in implementation	Fear of job loss, changes in workflows	Implement comprehensive change management strategies, clear communication, and training programs	Establish feedback mechanisms to address concerns promptly and adjust plans as necessary
Operational Disruptions	Inefficiencies, potential downtime	Centralizing operations can disrupt existing processes	Develop a phased implementation plan to minimize disruptions	Have contingency plans to address operational issues quickly
Market Penetration Challenges	Difficulty entering new markets, facing competition	Regulatory hurdles, strong competition	Conduct thorough market research, develop strategic partnerships	Adjust market entry strategies based on real-time feedback and conditions
Service Quality and Consistency	Inconsistent service quality across locations	Expansion may dilute quality control	Standardize processes, establish strict quality control measures, and train employees	Implement regular audits and feedback systems to identify and address quality issues
Regulatory Compliance	Non-compliance penalties, reputational damage	Evolving environmental regulations	Stay updated with regulatory changes, engage with regulatory bodies, invest in compliance management systems	Develop a response plan for non-compliance issues with corrective actions
Stakeholder Engagement	Resistance from stakeholders, reputational risks	Poor communication, lack of engagement	Develop a comprehensive stakeholder engagement plan, maintain transparency	Address concerns swiftly and transparently, adjust engagement strategies based on feedback

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