ANALYSIS OF INVESTMENT FEASIBILITY FOR THE PROCUREMENT OF ANATOMICAL PATHOLOGY LABORATORY INSTALLATIONS AT JASA KARTINI HOSPITAL TASIKMALAYA CITY

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ABSTRACT

Anatomic pathology services are critical in hospitals, not only for diagnosing various diseases but also for evaluating treatment outcomes and determining prognoses. Despite the growing importance of these services, few studies have focused on the feasibility of establishing an anatomic pathology laboratory. This study aims to assess the investment feasibility of procuring such a laboratory at Jasa Kartini Hospital, Tasikmalaya City, using a case study approach with both qualitative and quantitative methods. Data were collected through observations, documentation studies, and in-depth interviews with relevant informants. The study evaluated seven key feasibility aspects: market and marketing, technical and operational, management, human resources, legal, environmental, and financial. The market and marketing analysis showed strong demand forecasting and pricing strategies, while the technical and operational aspects demonstrated cost-effective use of technology, materials, and space, contributing to favorable financial outcomes. Management and HR were deemed feasible as staffing standards and management plans aligned with operational needs, while legal and AMDAL aspects were found to be in full compliance with regulations. Financially, the investment proved viable with a positive NPV of IDR 2,133,724,123, an IRR of 18.53%, a PI of 2.5, and a payback period of six years. These results indicate solid profitability and quick returns on investment. Overall, the study concludes that the investment is feasible across all seven aspects, providing recommendations for hospital management to optimize implementation and further evaluate the impact on service quality and financial performance.

Keyword: *investment feasibility, hospital business feasibility study, anatomic pathology laboratory*.

1. INTRODUCTION

Health services in Indonesia, particularly in West Java, have grown significantly, driven by increased public use, diversification of services, and improved quality. This rise is fueled by the expansion of the National Health Insurance program, allowing broader access to healthcare [1]. Additionally, competition among providers has pushed facilities to enhance service offerings, while rising public expectations for better care and outcomes have further challenged healthcare providers to improve [2]. These combined factors reflect the ongoing evolution of healthcare services in West Java and across Indonesia.

Diagnostic support services are the key to shaping a hospital's perceived service quality, reflecting its commitment to comprehensive care. These services are essential for accurate and timely diagnoses, which directly influence treatment outcomes. Hospitals that prioritize advanced diagnostic services often distinguish themselves as leaders in

patient care. Health technology plays a vital role in enhancing diagnostic accuracy and efficiency, and adherence to standards, such as those outlined in Law No. 17 of 2023, ensures the safety and effectiveness of these tools. Advanced technologies, like imaging and molecular testing, improve both diagnosis precision and patient outcomes.

Anatomical pathology laboratories, which provide vital tissue and organ analysis for diagnosing diseases like cancer, remain underdeveloped in many hospitals. The lack of these labs limits diagnostic capabilities, delaying accurate diagnoses and timely treatment. Expanding anatomical pathology services would improve early detection and diagnostic precision, especially for complex conditions requiring histopathological evaluation. On-site labs offer quicker test results, enabling faster treatment decisions and enhancing overall patient care. In the long term, establishing more anatomical pathology labs would elevate hospital standards, positioning them as leaders in advanced diagnostic services and improving patient outcomes.

Anatomical pathology services have evolved beyond their traditional role of diagnosing diseases to also assess treatment responses and predict disease prognosis. This shift reflects advancements in the field, including the use of immunological and molecular testing, which allow for more precise and comprehensive diagnoses. These methods provide deeper insights into disease mechanisms, contributing to the rise of personalized medicine. Techniques like immunohistochemistry help identify specific proteins that can predict a patient's response to therapies, particularly in cancer treatment, while molecular pathology detects genetic mutations, guiding targeted treatment strategies tailored to individual patients [3].

As the field continues to expand, anatomical pathology has become integral to multidisciplinary patient care, bridging the gap between diagnosis and therapeutic decision-making. This comprehensive approach, combining morphological, immunological, and molecular analyses, allows for a more accurate understanding of disease processes, improving not only diagnostic accuracy but also prognostic predictions and treatment outcomes. These developments underscore the vital role of anatomical pathology in modern healthcare, supporting both clinicians and patients in achieving more effective, individualized care.

The demand for anatomical pathology services has steadily risen in hospitals due to regulations like the Indonesian Minister of Health Regulation No. 755/MENKES/PER/IV/2011, which mandates that all tissues removed during surgery undergo pathological examination. This requirement ensures comprehensive analysis of excised tissues to detect diseases or abnormalities. Additionally, the Indonesian Anatomical Pathology Service Manual reinforces the necessity of these services in hospitals performing surgeries, with exceptions only for circumcision tissue, extracted teeth, and placental tissue from normal pregnancies. These guidelines highlight the critical role of anatomical pathology in ensuring accurate diagnoses and improved patient outcomes.

The increasing incidence of diseases like cancer, which require precise anatomical pathology examinations, has significantly driven the demand for these services in hospitals. In oncology, anatomical pathology is essential for confirming diagnoses, assessing disease stages, and guiding treatment plans. As the number of complex diseases and surgeries rises, the need for robust anatomical pathology services becomes crucial for accurate diagnoses and effective patient care [4]. This reliance highlights its vital role in modern healthcare, ensuring early detection and improving patient outcomes, especially in cancer treatment. Mandated requirements further ensure medical compliance and enhance care quality.

Cancer is the second leading cause of death globally, imposing a severe health burden that affects individuals, families, and healthcare systems. The prevalence and incidence of cancer continue to rise dramatically, both worldwide and in Indonesia. In 2020, Indonesia reported 396,914 new cancer cases and 234,511 cancer-related deaths, with these figures expected to nearly double in the next two decades. Data from the Basic Health Research shows a rise in national cancer prevalence from 0.14% in 2013 to 0.179% in 2018. In West Java Province, prevalence also increased, with 61.8% of cancer patients in 2018 receiving surgical treatment.

The rising cancer prevalence highlights the urgent need for high-quality diagnostic services, particularly anatomical pathology laboratories. As cancer cases increase, timely and precise diagnosis becomes crucial for determining treatment strategies and improving patient outcomes. Anatomical pathology labs play a key role by examining tissue samples, offering essential insights into disease progression. Expanding and upgrading these labs is vital to addressing the growing healthcare demands, ensuring that cancer patients receive accurate diagnoses and the best possible care in an increasingly burdened healthcare system.

Early detection and appropriate therapy selection are crucial strategies for managing malignancies effectively. Access to anatomical pathology laboratory services is essential for improving patient outcomes, as these labs play a vital role in diagnosing cancer and determining suitable treatment approaches. They provide insights that guide treatment initiation and evaluate outcomes, highlighting the need for these laboratories in all healthcare facilities, especially those offering cancer-related services. Their availability enables early cancer detection, allowing for timely interventions and monitoring of treatment efficacy, which is critical for adjusting therapeutic strategies and

improving survival rates. As the cancer burden increases, integrating anatomical pathology laboratories into healthcare systems is indispensable for enhancing cancer management and the quality of care provided to patients.

The number of anatomical pathology laboratories in Indonesia is insufficient to meet the growing demand for services. [5] emphasized that this shortage is due to two main factors: the limited number of anatomical pathology specialists and a lack of awareness among regional governments about the importance of these professionals and laboratories. This oversight results in inadequate prioritization for laboratory construction and development within healthcare infrastructure. Given the rising prevalence of malignancies, this situation poses a serious concern, as the lack of anatomical pathology services can delay diagnoses and treatment planning, negatively impacting patient outcomes. To tackle this issue, it is vital to raise awareness among policymakers and healthcare leaders about the crucial role of anatomical pathology in disease management. Prioritizing the establishment and expansion of these laboratories and investing in training more specialists is essential to enhance Indonesia's diagnostic capabilities. Such measures will not only improve cancer detection and treatment outcomes but also strengthen the overall public health response to the increasing cancer burden in the country.

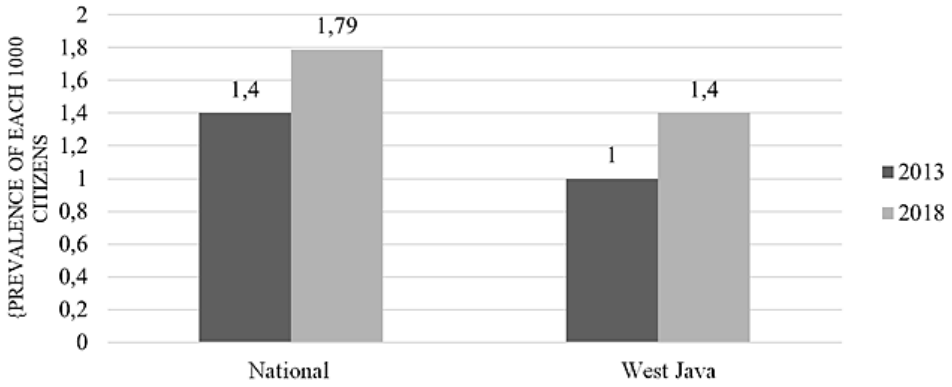

Fig-1: National and West Java Cancer Prevalence Developments (2013-2018)

Jasa Kartini Hospital in Tasikmalaya City is a Type C facility that offers various medical services, including surgery, biopsy, oncology, and chemotherapy. Between June 2021 and August 2023, the hospital performed a total of 3,127 anatomical pathology examinations, demonstrating a consistent monthly increase in demand for these diagnostic services. This growth reflects the hospital's dedication to high-quality medical care and emphasizes the vital role of accurate and timely diagnostics, especially in cancer management. As Jasa Kartini Hospital continues to enhance its anatomical pathology capabilities, it is well-positioned to meet the evolving needs of its patients and improve healthcare outcomes in the region.

Despite conducting a significant number of anatomical pathology examinations, Jasa Kartini Hospital currently outsources its internal patient examinations to external laboratories. This reliance presents several challenges, including limited control over marketing, operations, resources, and finances. It can also affect quality control, leading to discrepancies in service quality, delayed results, and communication issues between the hospital and the external facilities. Additionally, outsourcing hampers the implementation of standardized protocols essential for accurate diagnoses and timely treatment. To improve care quality and patient outcomes, Jasa Kartini Hospital should consider establishing an in-house anatomical pathology laboratory. This development would enhance oversight, streamline operations, and promote a more integrated approach to patient care, reinforcing the hospital's commitment to high-quality medical services.

Providing anatomical pathology services independently offers significant advantages for Jasa Kartini Hospital, including the flexibility to set examination rates, which allows management to influence profit margins and create competitive pricing that reflects service quality. Additionally, an in-house laboratory can lead to substantial cost savings by reducing operational expenses related to specimen transportation and handling. By eliminating the need for external referrals, the hospital can enhance operational efficiency and streamline processes, resulting in quicker and more accurate specimen processing. This shift improves turnaround times for diagnostic results and fosters better communication between healthcare providers and pathologists, facilitating more timely and effective patient management. Given these advantages, Jasa Kartini Hospital's management should prioritize developing independent anatomical pathology services, as investing in these capabilities would enhance the hospital's service offerings and strengthen its position in the healthcare market by providing high-quality, accessible, and efficient diagnostic

services while aligning with its mission to deliver comprehensive healthcare solutions and optimize financial performance.

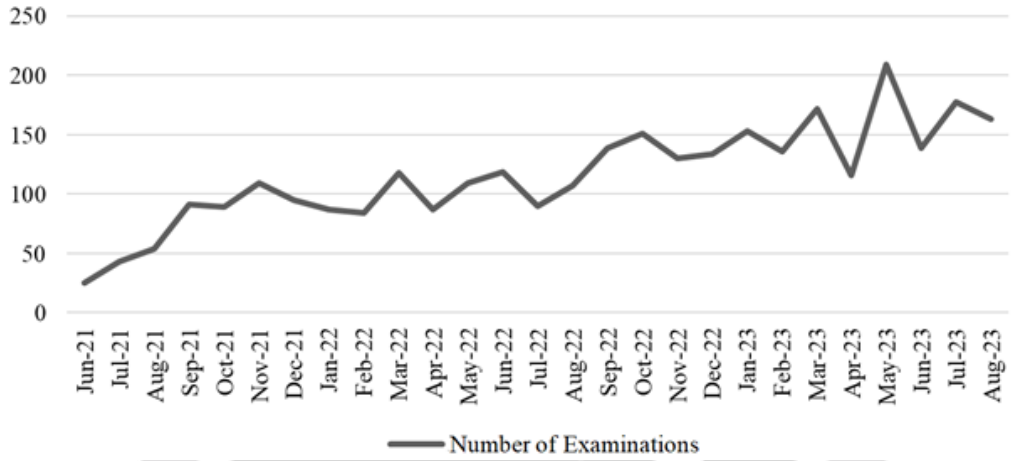

Fig-2: Anatomical Pathology Examinations Development at Jasa Kartini Hospital (June 2021 – August 2023)

The hospital paradigm has evolved to encompass an ethical-socio-economic framework, where hospitals are increasingly expected to apply business principles in their management while upholding their foundational identity rooted in norms, morals, and ethics, as outlined in the Indonesian Hospital Code of Ethics [6]. This shift necessitates a balanced approach that integrates ethical healthcare imperatives with financial sustainability. One effective strategy for hospitals is the implementation of comprehensive business feasibility studies for service development plans, enabling them to assess the viability of new services by analyzing market demand, operational costs, resource allocation, and expected financial returns. This systematic evaluation aids informed decision-making and aligns initiatives with community needs and organizational goals. By incorporating feasibility studies into their planning processes, hospitals can navigate healthcare complexities, optimize resources, and enhance service delivery, ultimately supporting their mission to provide compassionate care while achieving operational efficiency and financial stability in the community.

A business feasibility study is a vital tool for stakeholders in the healthcare sector, providing a foundation for informed decision-making and effective oversight during the implementation of business initiatives. By assessing the viability of proposed projects, these studies help prevent missteps associated with unprofitable ventures, ensuring resources are allocated efficiently and align with strategic objectives [7]. Additionally, conducting a feasibility study has become a prerequisite for establishing new hospitals or expanding services that require significant investment. According to Law No. 17 of 2023, these studies evaluate potential financial returns while considering factors like market demand, operational capacity, regulatory compliance, and community impact. Incorporating comprehensive feasibility analysis into the planning stages allows healthcare organizations to identify risks, forecast operational challenges, and align initiatives with community needs. By thoroughly evaluating projects before implementation, hospitals can foster sustainable growth, enhance service delivery, and uphold their commitment to high-quality healthcare amid the complexities of the healthcare landscape.

A business feasibility study is vital for ensuring that business plans are robust enough to prevent complications from inadequate planning. Effective planning encompasses strategic steps that facilitate efficient resource management to achieve organizational goals. The significance of planning is emphasized in both modern management concepts and Islamic teachings, which stress the importance of resource management and goal attainment. From an Islamic management perspective, planning is seen as a fundamental tool for achieving success and sustainability. This approach integrates modern management principles with ethical and spiritual values from Islamic teachings, highlighting the alignment of business practices with moral imperatives [8]. In organizational management, planning informed by Islamic values fosters a culture of ethical practices, social responsibility, and long-term sustainability. Moreover, decision-making rooted in Islamic principles—such as justice, transparency, and shared prosperity—cultivates a positive organizational culture, encouraging ethical behavior among employees and enhancing stakeholder trust and loyalty. By embedding these principles into planning and decision-making, organizations can balance financial success with social and ethical responsibilities, contributing to a more sustainable and equitable business environment.

Jasa Kartini Hospital is committed to improving both the quality and quantity of its services; however, it has become clear that many investments for development and expansion have not been guided by thorough planning. This is evidenced by the underperformance of several services, marked by low patient volumes and minimal public interest, despite effective marketing efforts. Furthermore, the financial outcomes of these initiatives have not met expectations, highlighting significant gaps in investment opportunities that require serious consideration. In response, the hospital's management has determined that conducting business feasibility studies must become an integral part of its organizational culture. By prioritizing these studies for every investment plan related to health service development and expansion, the hospital can ensure that future investments are based on a comprehensive understanding of market dynamics, patient needs, and financial viability. This proactive approach will optimize resource allocation and enhance the hospital's ability to deliver effective, sustainable healthcare services. Ultimately, embedding this practice into the management process will help Jasa Kartini Hospital align its operational strategies with its broader mission of providing high-quality healthcare while maximizing the benefits of its investments.

This research aims to conduct a comprehensive feasibility study of the investment plan for establishing an anatomical pathology laboratory at Jasa Kartini Hospital in Tasikmalaya City. By thoroughly analyzing the various aspects necessary for providing anatomical pathology services, this study seeks to offer a more detailed and nuanced understanding of the investment plan compared to previous studies on the subject. Notably, this research represents the first of its kind to undertake an in-depth analysis of the investment strategy for procuring an anatomical pathology laboratory. It is anticipated that the findings will furnish valuable insights and detailed descriptions that can assist hospital managers in making informed decisions. Additionally, the results of this study will serve as a crucial reference for hospital investors, guiding them in shaping service development policies that align with both the needs of the community and the strategic goals of the healthcare institution. By providing a thorough examination of the investment plan, this research aspires to contribute significantly to the existing body of knowledge in healthcare management and investment, ultimately enhancing the operational effectiveness and service quality at Jasa Kartini Hospital.

2. LITERATURE REVIEW

A business feasibility study is a systematic process aimed at evaluating the potential success of a proposed business activity. This assessment culminates in a conclusion regarding the feasibility status of the business plan under consideration. It is essential to distinguish between a business feasibility study and business planning; while the former focuses on evaluating the viability of various business ideas, the latter involves the development of a structured plan to execute a selected business strategy. Typically, a business feasibility study encompasses multiple alternative business concepts, allowing for a comparative analysis of each proposal's strengths and weaknesses. By thoroughly assessing and testing these business activity proposals, stakeholders can identify the most viable options. Once this evaluation process is complete, a comprehensive business plan can be formulated based on the selected proposals. This approach ensures that the resulting business plan is more detailed and aligned with the specific targets identified during the feasibility study [9]. Ultimately, conducting a robust business feasibility study serves to mitigate risks and enhance decision-making, providing a solid foundation for successful business planning and implementation.

Business organizations typically have distinct goals that guide their operations and decision-making processes. These objectives are often articulated in the organization's vision and mission statements, which serve as foundational elements for strategic planning and activities. Generally, the primary aim of any business activity is to generate profits for the stakeholders involved. However, business objectives can be categorized into three main types based on the planned time horizon, [10]:

1. Short-term Goals: Short-term goals are organizational objectives established to be achieved within a relatively brief timeframe, typically less than one year. These goals often align closely with medium-term objectives, as they encompass specific targets across various management areas within the organization. Short-term goals may be set for different periods, such as a trimester, quarter, semester, or the full year, allowing organizations to focus on immediate priorities and operational effectiveness. Examples of short-term goals include increasing quarterly sales by a specific percentage, improving customer satisfaction ratings within a six-month period, or successfully launching a marketing campaign within the next three months. By emphasizing short-term goals, organizations can foster a culture of accountability, track progress more effectively, and adapt their strategies in response to changing market conditions, ultimately paving the way for achieving longer-term objectives.
2. Medium-term Objectives: Medium-term objectives typically cover a timeframe of one to three years and are characterized by their strategic focus. These objectives are crucial for translating long-term aspirations

into actionable plans. Examples of medium-term goals include initiatives aimed at expanding market share, which might involve targeted marketing campaigns or strategic partnerships; launching new products or services to meet emerging consumer demands; or enhancing operational efficiencies through process improvements or technology investments. By establishing medium-term objectives, organizations can create a roadmap that bridges the gap between immediate actions and overarching long-term goals. This approach enables them to assess progress, make necessary adjustments, and ensure that their resources are aligned effectively to achieve sustained growth and competitiveness in their respective markets.

3. Long-term Goals: Long-term goals are organizational objectives established to be achieved over an extended period, typically exceeding five years. These goals provide a strategic direction for the organization and often require substantial planning, resources, and commitment to realize. For instance, Company A has set an ambitious target of doubling its customer base over a ten-year period. This goal emphasizes the importance of growth and customer acquisition as central to its long-term strategy. Similarly, Company B aims to increase its market share by ten percent within eight years. Such objectives not only reflect the organization's aspirations for expansion but also indicate a commitment to enhancing its competitive position within the industry. By focusing on these long-term goals, organizations can align their resources, develop sustainable practices, and foster innovation to achieve significant milestones in their operational journey.

By categorizing business objectives based on timeframes, organizations can effectively prioritize their efforts, allocate resources efficiently, and develop strategies that align with their vision and mission, ultimately driving sustained growth and success.

A comprehensive business feasibility study involves evaluating seven critical aspects: legal, market and marketing, technical or operational, human resources (HR), management, financial, and environmental impact analysis [9]. According to [9], these aspects are interrelated and must be assessed collectively to determine the viability of a business plan. The legal aspects of a feasibility study are particularly crucial, as they establish the framework for the lawful operation of the business [11]. Proper evaluation of licensing requirements and compliance with applicable legal provisions is essential, as neglecting these factors can lead to significant challenges and potential business failures. For instance, inadequate consideration of the legality surrounding the organizational structure or business activities may result in operational disruptions, legal penalties, or an inability to secure necessary permits. Therefore, a thorough review of legal aspects not only safeguards the integrity of the business but also serves as a foundational element for successful planning and execution. This highlights the importance of integrating legal considerations into the overall feasibility assessment process to ensure a well-rounded evaluation of the business opportunity.

The legal aspects of a business feasibility study are closely intertwined with environmental impact analysis, as both play crucial roles in the sustainability and compliance of business operations. Environmental impact analysis is often a prerequisite for obtaining business permits and is governed by relevant legislation that aims to protect the environment while allowing for economic development. In this context, environmental impact analysis serves as a vital tool for identifying both the positive and negative effects that a business may have on its surrounding environment. By thoroughly assessing these impacts, businesses can develop strategies to mitigate adverse effects, ensuring that their operations are not only legally compliant but also environmentally responsible. According to [12], the incorporation of environmental considerations into the planning process can lead to more comprehensive business strategies that align with sustainability goals. Moreover, a robust environmental impact analysis can enhance a business's reputation, as stakeholders increasingly value corporate responsibility. It allows businesses to proactively address potential environmental issues, reducing the risk of regulatory penalties and fostering positive community relations. By recognizing the interconnectedness of legal and environmental considerations, businesses can create more holistic and effective feasibility studies that support sustainable growth and responsible management practices.

Assessing the market and marketing aspects of a business feasibility study is crucial for ensuring the long-term success and sustainability of a business. Many enterprises fail to thrive due to insufficient market analysis, leading to poor product selection and ineffective marketing strategies. An in-depth understanding of the market allows businesses to identify customer needs, preferences, and trends, which are essential for developing offerings that resonate with their target audience. Conducting a thorough market analysis prepares a company for potential shifts in market dynamics. By evaluating competitive landscapes, consumer behavior, and industry trends, businesses can adapt their strategies proactively, maintaining their competitive edge. Additionally, this analysis aids in demand forecasting, enabling companies to project potential revenue and financial viability from their business plans [13]. Accurate demand forecasting helps organizations allocate resources efficiently, set realistic sales targets, and develop effective marketing campaigns. Moreover, understanding market conditions allows businesses to tailor their marketing efforts to reach the right audience effectively. This includes selecting appropriate channels, crafting

compelling messaging, and determining optimal pricing strategies. In essence, a comprehensive assessment of market and marketing aspects is not merely a preliminary step; it is a fundamental component of strategic planning that influences product development, customer engagement, and overall business growth. By prioritizing this analysis, businesses can mitigate risks, capitalize on opportunities, and enhance their prospects for success in a competitive landscape.

The technical and operational aspects are crucial in assessing the feasibility of a business. A lack of in-depth analysis in this area can lead to significant negative consequences, including financial losses, harm to the company's reputation, and customer dissatisfaction. These issues can ultimately enable competitors to seize market share [14]. The technical aspect involves evaluating the necessary technology and equipment to operate the business efficiently. This includes not only selecting reliable and cost-effective technology but also considering its scalability and adaptability to future needs. Choosing the wrong technology can result in inefficiencies, delays, or increased operational costs, all of which can adversely affect profitability. On the other hand, the operational aspect focuses on the processes, procedures, and human resources required to implement the business plan effectively. This includes assessing workflow efficiency, employee skill levels, and resource allocation. A well-thought-out operational plan is essential for ensuring that the business runs smoothly and meets its objectives. Moreover, technical and operational aspects are interconnected with financial planning. Accurate budgeting for technology and equipment is vital for making informed financial decisions. This link emphasizes the need for a comprehensive approach to assessing all aspects of a business feasibility study, ensuring that each element supports the others in creating a viable business plan [15].

The human resources (HR) aspect is a vital component of a business feasibility study, especially in the service sector, where the quality of service often hinges on the skills and capabilities of employees. Analyzing HR aspects can significantly influence key business outcomes, including profit levels, competitiveness, sustainability, adaptability, and flexibility in a dynamic market [16]. When assessing HR for a business plan, several critical elements should be considered:

1. Staffing Needs: This involves estimating the number of employees required to meet operational demands and the qualifications necessary for various roles. A thorough understanding of staffing needs ensures that the business can adequately support its services while maintaining quality.
2. Skill Assessment: Evaluating the existing skills of the workforce is essential for identifying gaps that need to be filled. This may involve hiring new staff or providing additional training to current employees.
3. Recruitment and Retention Strategies: A solid plan for recruiting and retaining qualified personnel is essential. This includes developing competitive compensation packages, creating a positive work environment, and offering opportunities for career advancement.
4. Future HR Development: Planning for ongoing HR development is crucial once the business is operational. This involves implementing continuous training programs, performance management systems, and succession planning to ensure the workforce evolves with the business's needs [17].

By conducting a comprehensive HR analysis, businesses can better prepare for the challenges of operation and ensure they have the right people in place to drive success. Effective HR management contributes not only to operational efficiency but also to fostering a culture of engagement and commitment among employees, which is essential for long-term sustainability.

The management aspect of a business feasibility study is crucial for ensuring that the business operates smoothly and effectively. The manager's suitability and capability significantly influence the likelihood of achieving business objectives and maintaining continuity. Poor management can lead to unmet targets and, ultimately, business failure [17].

Here are several key elements to consider when assessing the management aspect:

1. Management Structure: Establishing a clear organizational structure helps define roles and responsibilities. It ensures that each team member knows their specific duties and how they contribute to the overall goals of the business.
2. Leadership Skills: Evaluating the leadership qualities of the management team is essential. Effective leaders inspire and motivate employees, foster a positive work environment, and navigate challenges successfully.
3. Strategic Planning: A well-defined strategic plan outlines the business's vision, mission, and objectives. This plan should detail the strategies for achieving these goals and be adaptable to changing market conditions.
4. Operational Processes: Assessing existing operational processes helps identify areas for improvement. Streamlining operations can enhance efficiency, reduce costs, and improve service delivery.

5. Performance Monitoring: Implementing a system for tracking performance against targets allows for ongoing evaluation and adjustments. Regular assessments help identify issues early, enabling proactive management.
6. Crisis Management: Understanding how management plans for potential crises or challenges is vital. A robust crisis management plan can mitigate risks and minimize disruptions to operations [18].
7. Stakeholder Engagement: Engaging stakeholders—such as employees, customers, and investors—in the management process fosters collaboration and support for the business's goals.

By thoroughly assessing the management aspect, businesses can develop a strong framework for decision-making, resource allocation, and overall operational effectiveness. This proactive approach not only enhances the chances of achieving business goals but also builds a resilient organization capable of adapting to changes in the market landscape.

The financial aspect of a business feasibility study is indeed one of the most critical components, as it provides a quantitative evaluation of the potential financial performance of a proposed business plan. By employing various financial assessment methods, stakeholders can make informed decisions regarding the viability and profitability of the project. Here's a closer look at some of the primary methods used to assess the financial feasibility of a business plan:

1. Net Present Value (NPV):
   NPV calculates the difference between the present value of cash inflows and outflows over a specific period. A positive NPV indicates that the projected earnings exceed the anticipated costs, making the project financially viable. This method helps assess whether the investment will yield a favorable return considering the time value of money.
2. Internal Rate of Return (IRR):
   IRR represents the discount rate at which the NPV of cash flows from an investment equals zero. Essentially, it indicates the expected annual rate of return on the investment. A project is generally considered acceptable if its IRR exceeds the required rate of return, as this suggests that the project is likely to generate a profit.
3. Profitability Index (PI):
   The Profitability Index is a ratio that compares the present value of future cash flows to the initial investment cost. A PI greater than 1 indicates that the project is expected to generate value, while a PI less than 1 suggests that the investment may not be worthwhile. This metric helps prioritize projects when capital is limited.
4. Payback Period (PP):
   The Payback Period calculates the time required for the initial investment to be recovered from the net cash inflows generated by the project. While it does not account for the time value of money, it provides a simple measure of how quickly an investment can be recouped. Shorter payback periods are often preferred, especially in industries where capital is at risk.

By comprehensively evaluating these financial aspects, businesses can effectively gauge the profitability and sustainability of their investment plans. A robust financial feasibility study not only aids in securing funding but also enhances strategic decision-making, ultimately contributing to the long-term success of the organization.

Research on business feasibility studies or investment feasibility studies has been widely conducted across various sectors, encompassing both health and non-health domains. In the health sector, these studies frequently focus on assessing the feasibility of investment plans, particularly in the context of developing service facilities. The primary objective of these studies is to evaluate whether proposed investments will yield adequate returns and meet the healthcare needs of the community. For instance, [15] performed a comprehensive feasibility analysis for developing investments in radiology equipment. This study is particularly relevant to the current research, as it also centers on the medical sector, specifically targeting diagnostic services within hospitals. [15] findings reveal that the proposed investment in radiology equipment is financially viable, showcasing several key indicators of economic success. The analysis produced a positive Net Present Value (NPV) of IDR 5,252,878.3, indicating that the anticipated cash flows from the investment exceed the initial outlay, thus supporting the notion of financial feasibility.

Furthermore, the study reported an Average Rate of Return (ARR) of 150%, suggesting that the investment is expected to generate substantial returns relative to its cost. The Internal Rate of Return (IRR) was calculated at 15.2%, surpassing the benchmark interest rate of 10%, which implies that the investment is likely to be more profitable than alternative investments with similar risk profiles. Lastly, a Profitability Index (PI) of 1.1 reinforces the positive financial outlook, as a PI greater than 1 indicates that the present value of future cash flows is greater than the initial investment, thereby enhancing the justification for proceeding with the investment. These findings

not only provide a solid foundation for understanding the economic implications of investments in healthcare services but also underscore the importance of conducting thorough feasibility studies. Such studies are essential for hospital administrators and stakeholders to make informed decisions regarding resource allocation, service expansion, and ultimately improving the quality of healthcare delivery. As the healthcare landscape continues to evolve, these assessments will play a critical role in guiding investment strategies and ensuring that facilities meet the growing demands of the populations they serve.

Another notable study was conducted by [19], which focused on a financial analysis of the feasibility of investing in an angiography laboratory within a hospital located in Yogyakarta. This research stands out not only for its financial feasibility assessment but also for its comprehensive approach to understanding patient demographics and market dynamics. In addition to traditional financial indicators, the study examined the willingness to pay and ability to pay among potential patients, which are crucial factors that can support the overall financial analysis of investment plans. The findings from [20] research indicate that the investment in the angiography laboratory is financially viable, showcasing impressive financial metrics. The analysis revealed a positive Net Present Value (NPV) of IDR 23,569,363,711, suggesting that the expected cash inflows from the investment significantly exceed the initial capital outlay. This strong NPV underscores the potential profitability of the investment and its capacity to generate value over time.

Moreover, the Internal Rate of Return (IRR) calculated in the study was an impressive 29%, which is considerably higher than the typical cost of capital. This high IRR indicates that the investment is anticipated to yield returns well above the required threshold, making it an attractive option for stakeholders. Additionally, the Payback Period (PP) was determined to be three years and seven months, which is a relatively short time frame for recouping the initial investment. A shorter payback period enhances the attractiveness of the investment, as it implies quicker recovery of funds and reduced risk exposure. Furthermore, the study calculated a Return on Investment (ROI) of 120%, reflecting the investment's efficiency in generating profit relative to its cost. This high ROI signifies that for every IDR invested, the hospital can expect to earn a substantial return, further validating the financial rationale for establishing the angiography laboratory.

Overall, [20] research highlights the critical role of financial feasibility studies in the healthcare sector, particularly when evaluating investments in specialized medical facilities. By incorporating patient willingness to pay and ability to pay into the analysis, the study provides a more nuanced understanding of market dynamics, enabling hospital management to make informed decisions that align with both financial objectives and patient needs. Such thorough feasibility studies are essential for ensuring that healthcare investments are not only economically viable but also capable of enhancing patient care and service delivery in the long term.

[15] research presents a contrasting perspective compared to most other investment feasibility analysis studies conducted in the healthcare sector. This study specifically focused on the investment policy for C-Arm radiology equipment, analyzing its financial viability through key performance indicators. The findings from [20] analysis reveal significant challenges regarding the investment's feasibility. The research reported a negative Net Present Value (NPV) of IDR -1,279,905,141, indicating that the expected cash inflows from the investment would not cover the initial costs. A negative NPV suggests that the investment would likely result in a financial loss, making it an unattractive option for stakeholders. Additionally, the Internal Rate of Return (IRR) was found to be 0%, which implies that the investment would not generate any return above the cost of capital. This lack of return further reinforces the notion that the investment is financially unviable, as investors typically seek opportunities that yield positive returns.

Furthermore, the Profitability Index (PI) was calculated at -0.174, which indicates that for every unit of currency invested, there would be a loss in value rather than a gain. A PI less than 1, signals that the project is not worth pursuing, as it does not provide sufficient returns to justify the initial investment. Overall, [20] research highlights the importance of conducting thorough and honest feasibility studies in the healthcare sector. The negative results of this study serve as a reminder that not all investment opportunities are sound, and careful consideration must be given to financial metrics before proceeding with significant expenditures on medical equipment. By identifying unfeasible investments early on, healthcare facilities can avoid potential financial pitfalls and redirect their resources towards more viable projects that align with their strategic goals and operational needs. This research adds to the growing body of literature emphasizing the critical role of rigorous financial analysis in guiding investment decisions in the healthcare industry.

Islam places a strong emphasis on the importance of careful planning and strategic foresight in all aspects of life. This principle is rooted in the belief that effective planning leads to the successful achievement of goals and the optimal use of resources. The Qur'an encourages Muslims to be diligent in their preparations, particularly when facing potential challenges or conflicts. One significant verse that highlights this call to strategic planning is found in Surah Al-Anfal (8:60), which states:

"And prepare against them whatever you are able of power and of steeds of war by which you may terrify the enemy of Allah and your enemy and others besides them whom you do not know [but] whom Allah knows. And whatever you spend in the cause of Allah will be fully repaid to you, and you will not be wronged."

This verse underscores the necessity of being prepared and proactive, advocating for the allocation of resources and efforts towards enhancing one's capabilities. The emphasis on preparation not only applies to military readiness but extends to all areas of life, including business, education, and personal development. In the context of business and investment, this Islamic perspective can be applied to the practice of conducting thorough feasibility studies and careful planning before embarking on new ventures. By ensuring that all necessary preparations are in place, individuals and organizations can navigate uncertainties more effectively, minimize risks, and position them for success.

The importance of careful planning and informed decision-making is further emphasized in the Qur'an through various verses that guide believers to act wisely and with knowledge. One such verse is found in Surah Al-Isra (17:36), which states:

"And do not pursue that of which you have no knowledge. Indeed, the hearing, the sight, and the heart - about all those [one] will be questioned."

This verse underscores the significance of acting based on knowledge and understanding rather than on assumptions or ignorance. It encourages individuals to seek information and to reflect on the potential impacts and consequences of their actions. In the context of planning and decision-making, this verse serves as a reminder that one must conduct thorough research and analysis before embarking on any venture.

In practical terms, this can be interpreted as a call to ensure that all business plans and strategies are backed by adequate data and analysis. For example, when conducting a business feasibility study, it is essential to assess market conditions, financial projections, and operational capabilities comprehensively. By grounding decisions in factual information and expert insights, individuals and organizations can make informed choices that align with their goals and values. The instruction to consider the consequences of one's actions is particularly relevant in business contexts, where decisions can have far-reaching effects on stakeholders, the community, and the environment. Therefore, it is crucial to integrate ethical considerations and social responsibility into planning processes, reflecting the Islamic values of justice and fairness. By adhering to these principles from the Qur'an, individuals and organizations can cultivate a culture of wisdom and responsibility in their actions, ultimately contributing to more sustainable and beneficial outcomes for themselves and society as a whole.

3. METHOD

This research employs a descriptive analysis methodology, utilizing a mixed-methods approach that combines both qualitative and quantitative techniques within the framework of a case study. The primary objective is to assess the feasibility of investing in the establishment of an anatomical pathology laboratory through a comprehensive business feasibility study. As a case study, the findings are contextualized and limited to the specific cases under investigation, providing insights relevant to Jasa Kartini Hospital. Data collection for this study incorporates two distinct methods: primary data and secondary data. Primary data is gathered through direct observations and in-depth personal interviews with key informants. These interviews are designed to elicit rich, detailed information that pertains to the research objectives, helping to address the specific research questions while enriching the understanding of the case at hand. Secondary data is collected through documentation studies, which involve reviewing existing records and reports related to anatomical pathology services at Jasa Kartini Hospital. The core data utilized in this study consists of anatomical pathology examination records from the hospital, covering the period from June 2021 to August 2023. This time frame provides a comprehensive view of the laboratory's operational history, facilitating an analysis of trends and performance metrics relevant to the investment feasibility assessment. The results of this research will be presented in a structured manner, starting with a thorough analysis of the collected data derived from documentation studies, observations, and interviews. Most variables, representing the indicators across the seven aspects of business feasibility, will undergo qualitative descriptive analysis. This approach enables a nuanced understanding of each aspect, allowing for the identification of strengths, weaknesses, opportunities, and threats related to the investment proposal. In contrast, quantitative analysis will be primarily focused on the financial aspect feasibility indicators. This includes employing financial metrics such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period (PP), and Profitability Index (PI) to evaluate the expected financial performance of the proposed anatomical pathology laboratory. By integrating qualitative and quantitative data, this research aims to provide a holistic view of the investment's feasibility, ultimately aiding decision-makers at Jasa Kartini Hospital in determining the viability of this strategic initiative.

4. RESULTS AND DISCUSSION

4.1 Market Aspect Feasibility

The data in this study includes hospitals located in Tasikmalaya City, Tasikmalaya Regency, Ciamis Regency, Banjar City, Pangandaran Regency, and Garut Regency, which are considered to be in proximity to Jasa Kartini Hospital in Tasikmalaya City. Within Tasikmalaya City, there are 13 hospitals, with distances ranging from one kilometer to 6.9 kilometers from Jasa Kartini Hospital, averaging 2.7 kilometers, and a median distance of 1.8 kilometers. Additionally, there are 20 hospitals in surrounding cities and regencies, with an average distance of 45.4 kilometers and a median distance of 41.5 kilometers from Jasa Kartini Hospital. Besides hospitals, other health service facilities that could serve as indirect external consumers in this business plan include independent obstetrics and gynecology (Sp.OG) clinics, general practitioner and dentist clinics, midwifery practices, and community health centers that offer pap smear services and HPV vaccinations.

Table -1: Market and Marketing Aspects Feasibility Analysis Results

Indicators	Results	Notes
Market Structure	Feasible	Further market structure analysis is needed because the research has not considered the possibility of competitors not identified in this research
Market Segment	Feasible	Further market segmentation analysis is necessary for several reasons. First, it has not considered the challenges of penetrating the indirect market, as many entities lack reference laboratory data. Second, the research has not quantified the potential external market share for Jasa Kartini Hospital. Lastly, it has not identified potential non-hospital indirect markets, such as private clinics and community health centers, that could be targeted for pap smear examination products. Addressing these gaps will enable the hospital to refine its marketing strategy and improve service delivery.
Market Positioning	Feasible	Further market positioning analysis is essential for several reasons. First, the current formulation does not incorporate future input from laboratory staff who will implement the services, which could provide valuable insights. Second, it lacks feedback from potential consumers, as surveys have not been conducted to understand their preferences and needs. Addressing these aspects will enhance the accuracy and effectiveness of the market positioning strategy for Jasa Kartini Hospital.
Marketing Mix Strategy	Feasible	Further analysis of the marketing mix strategy is necessary for several reasons. First, some formulated strategies are broad and lack the detailed implementation plans needed for practical application. Second, the methods used by researchers in aspects like pricing and cost calculations require refinement to enhance their accuracy and relevance. Addressing these issues will strengthen the effectiveness of the marketing mix for Jasa Kartini Hospital.
Demand Forecast	Feasible	Further study of demand forecasting calculations is essential for several reasons. Firstly, the reliance on a single forecasting method limits the potential for accuracy, as utilizing multiple models could enhance predictive insights. Secondly, the current analysis employs a relatively small amount of historical data, which raises questions about the reliability of the forecasting results. Finally, the calculations are based solely on internal historical data, without considering external demand data from both direct and indirect consumers, which could provide a more comprehensive understanding of market dynamics.

Another external market potential identified in this research is the opportunity to attract direct external consumers, particularly the public, for early detection services (screening) for cervical cancer. While anatomical pathology services cannot be directly marketed to the public, they need to be integrated into a comprehensive service package that involves collaboration among various departments within the hospital. Cervical cancer screening and HPV vaccination are services that hospitals can offer directly to the community. This initiative requires effective coordination and collaboration between professional staff across different hospital installations, especially between obstetrics and gynecology specialists in outpatient services and anatomical pathology specialists in the laboratory.

4.2 Feasibility Analysis of Technical and Operational Aspects

The Indonesian Anatomical Pathology Service Manual stipulates that the anatomical pathology laboratory at Jasa Kartini Hospital should provide essential examination services, including histopathological assessments in various categories and cytological evaluations, particularly pap smears and body fluids. To effectively develop pap smear examination services, it is crucial to implement comprehensive and integrated services that involve collaboration with obstetrics and gynecology clinics. Additionally, expanding human papillomavirus (HPV) vaccination services will further enhance the hospital's capacity to deliver holistic care in cervical cancer prevention and management.

Table -2: Results of Feasibility Analysis of Technical and Operational Aspects

Indicators	Results	Notes
Product Design	Feasible	Further product design analysis is necessary for several reasons: first, the current service product design does not incorporate future input from laboratory management staff; second, it lacks insights from potential consumers; and third, the product design has not conducted an in-depth study on the types of products that can be offered based on the planned procurement of equipment and technology, highlighting the need for additional input from laboratory personnel.
Quality Design	Feasible	Further quality design analysis is essential because, similar to market positioning, the formulation of service product quality values has not taken into account input from laboratory staff and potential consumers. This oversight limits the effectiveness of quality standards and may not align with the actual needs and expectations of users.
Technology and Equipment	Feasible	Further analysis of technology and equipment is necessary because it has not yet incorporated input from laboratory management staff. This input is crucial for ensuring that the selected technology and equipment align with operational needs and enhance service delivery.
SPO and Service Flow	Feasible	Further analysis of Standard Operating Procedures (SOPs) and service flows is needed for several reasons: first, the current formulation only outlines broad points of the strategy design without detailed steps, making it challenging to apply directly; second, the existing SOPs and service flows have not incorporated input from future laboratory implementing staff, which is essential for practical implementation and effectiveness.
Location	Feasible	Further study of the location is necessary because this research has not developed a network scheme that could enhance opportunities for capturing a larger market share.
Layout	Feasible	Further layout analysis is needed for several reasons: 1. The layout design does not yet incorporate future input from laboratory management staff; and 2. The design has not considered insights from professional experts in layout design, such as architects and interior designers.
Budget Planning	Feasible	Further RAB analysis is needed for several reasons: 1. The drafted RAB does not incorporate future input from laboratory implementing staff; and 2. The prices of tools and materials listed in the RAB are based on independent online searches and surveys from 2021, necessitating updated price data from more reliable sources, such as direct suppliers or vendors.

Considering that Jasa Kartini Hospital offers surgical oncology services, it would be advantageous to also provide immunohistochemistry (IHK) services to support the diagnostic needs for malignant diseases in this field. The analysis of market structure indicators related to price determination indicates that immunohistochemical examinations can be claimed outside the INA-CBG guarantee package, particularly as follow-up diagnostic tests for breast cancer and non-Hodgkin lymphoma. This presents an opportunity to evaluate the urgency of introducing IHK services, which could enhance the hospital's flexibility in managing cash flow within the anatomical pathology laboratory and improve overall service offerings.

The analysis yields a comprehensive list of Standard Operating Procedures (SOPs) and service flows essential for the business plan concerning anatomical pathology examination services at Jasa Kartini Hospital. This research focuses on formulating the necessary standard requirements and procedural flows for future service implementation. The design of the SOPs, instructions, and service flows should be based on established scientific references,

regulations, and guidelines, while also being tailored to the existing conditions and practices at the hospital. Once developed, these SOPs and flows must be approved by the hospital director, effectively communicated to staff, implemented, and evaluated periodically to enhance the quality of anatomical pathology examination services over time.

The analysis indicates that the investment plan for establishing an anatomical pathology laboratory at Jasa Kartini Hospital is strategically advantageous due to its geographic location. This advantage not only enhances the hospital's competitive positioning but also influences the extent of its service coverage area. To maximize the effectiveness of this investment, a location analysis focusing on the development of future network channels is essential for reaching target markets beyond Tasikmalaya City. Given the relatively short distance between Jasa Kartini Hospital and several potential indirect consumers, such as nearby hospitals, the anatomical pathology laboratory can effectively serve these clients directly, further expanding its reach and impact in the region.

The analysis of the investment plan for the anatomical pathology laboratory installation at Jasa Kartini Hospital was conducted using literature reviews and direct observations. The literature review revealed essential minimum building and infrastructure requirements for an anatomical pathology laboratory, as specified in Minister of Health Regulation Number 411/MENKES/PER/III/2010. This regulation outlines the necessary types and sizes of rooms in Appendix IV, Table I, ensuring that the laboratory meets all health and safety standards. By adhering to these regulations, the hospital can create an effective and compliant laboratory environment that supports high-quality pathological services.

The Indonesian Anatomical Pathology Service Manual emphasizes that the workspace for anatomical pathology services must maintain cleanliness and adequate airflow to prevent chemical odors. It is crucial to regulate temperature and humidity within the laboratory, keeping the temperature between 22-26ºC and humidity levels between 35-60%. For comprehensive guidelines on facility condition standards, the manual provides a detailed table outlining the condition standards and layout requirements for anatomical pathology laboratory rooms. Meeting these standards is essential for ensuring a safe and effective working environment that supports optimal service delivery.

The budget plan (RAB) for establishing anatomical pathology laboratory facilities at Jasa Kartini Hospital was developed through a comprehensive analysis involving literature reviews, documentation studies, direct observations, and interviews with key informants. The research indicates that the total initial investment required to fulfill infrastructure needs, including technology, tools, and materials for operational activities, amounts to IDR 926,099,702 (nine hundred twenty-six million ninety-nine thousand seven hundred and two rupiah). This estimate excludes licensing fees and human resource costs, which must also be considered during the initial investment phase.

4.3 Feasibility Analysis of Management Aspects

The assessment of the management aspect in this research focuses on the principles guiding the organizers in managing the investment plan for the anatomical pathology laboratory installation at Jasa Kartini Hospital. This evaluation will cover general components rather than delving deeply into the specifics of the initial development project. Key points will be highlighted based on the researcher’s analysis from documentation studies, direct observations, and interviews with informants, emphasizing how management will be implemented moving forward.

The discussion on organizational indicators will be informed by literature studies and interviews with research informants. According to Minister of Health Regulation Number 14 of 2021, which outlines standards for business activities and products related to risk-based licensing in the health sector, medical laboratories are required to establish policies regarding their organizational structure and work procedures (SOTK). This policy should clearly outline all activities undertaken by the laboratory, ensuring clarity in roles and responsibilities. This framework is crucial for the effective management and operation of the anatomical pathology laboratory at Jasa Kartini Hospital.

The regulation specifies that the Medical Laboratory SOTK chart must include at least four key positions: (1) Head of the Medical Laboratory, (2) Person in Charge/Inspection/Testing/Processing Coordinator, (3) Person in Charge/Quality Management Coordinator, and (4) Person in Charge of HR and General Coordination. Additionally, it outlines the mechanisms for appointing these positions and details the human resource qualifications required for each role, ensuring that the laboratory is staffed with qualified personnel to uphold standards of service and compliance (Permenkes No. 14 of 2021). This structured approach is essential for the effective governance and operational efficiency of the anatomical pathology laboratory at Jasa Kartini Hospital.

Table -3: Results of Feasibility Analysis of Management Aspects

Indicators	Results	Notes
Planning	Feasible	Further planning analysis is essential as the current formulation is too broad and

		lacks actionable details, necessitating a more comprehensive approach to develop clear, practical strategies for the anatomical pathology laboratory at Jasa Kartini Hospital.
Organizing	Feasible	Further organizational analysis is needed because the current SOTK and staff duties do not incorporate input from future laboratory management staff. Their insights are essential for creating a functional and effective organizational framework.
Actuating	Feasible	Further implementation/mobilization analysis is necessary because the current formulation consists only of broad points and lacks detailed, actionable steps that can be directly applied.
Controlling	Feasible	There is a need for further analysis of control and supervision because the current formulation consists only of broad points and has not been carried out in detail, making it unlikely to be directly applicable.

The Indonesian Anatomical Pathology Service Manual provides detailed guidance on the organizational structure and management of anatomical pathology laboratories, particularly in type B hospitals. It specifies the minimum requirements for the SOTK chart, outlining the necessary positions along with their primary duties and functions to ensure the continuity of services in the laboratory. Chapter II of the manual elaborates on these roles, detailing the responsibilities associated with each position, such as the Head of the Medical Laboratory, Inspection/Testing/Processing Coordinator, Quality Management Coordinator, and HR and General Coordinator. This structured approach is vital for maintaining service quality and operational efficiency within the anatomical pathology laboratory at Jasa Kartini Hospital. The assessment of the feasibility of monitoring and controlling aspects in the investment project plan for the anatomical pathology laboratory installation at Jasa Kartini Hospital was conducted through documentation studies, direct observations, and interviews with research informants. This multifaceted approach served as a method of confirmation and validation of the proposed management design. The evaluation focused on general management criteria necessary for effective supervision and control, ensuring they are aligned with the requirements for future service activities.

4.4 Feasibility Analysis of Human Resources Aspects

The feasibility assessment of the human resources (HR) aspect in the investment plan for the anatomical pathology laboratory procurement was conducted through literature studies, researcher observations, and interviews with informants. This assessment is based on four indicators: (1) analysis of HR needs, (2) planning for HR recruitment and selection, (3) planning for HR education and training, and (4) budgeting for HR management (RAB).

Once the specifications for the required profession or job position are established, the recruitment strategy should leverage various channels to attract a broad and diverse range of candidates. Effective methods include posting vacancy announcements on relevant job boards, attending career fairs at universities with medical technology programs, utilizing social media, creating employee referral programs, and offering competitive compensation packages. These approaches can enhance the opportunity to attract quality HR candidates [21].

A rigorous selection process can enhance the chances of securing the best staff candidates. This can involve various methods such as skills testing, personality assessments, and multi-stage interviews that allow evaluation by different parties. These selection methods should be complemented by information from references and background checks to ensure optimal outcomes. Once the selection results are finalized, offers can be extended to the chosen candidates [17]. Additionally, providing laboratory and hospital tours, along with job shadowing opportunities, can give candidates a realistic insight into the roles they are expected to fulfill.

An essential element of human resource planning to enhance the successful delivery of laboratory services in hospitals is the development and implementation of education and training programs for laboratory staff. This feasibility study underscores the significance of investing in the continuous professional development of anatomical pathology laboratory personnel to ensure high-quality diagnostic services [22].

Table -4: Results of Feasibility Analysis of Human Resources Aspects

Indicators	Results	Notes
HR Requirements Analysis	Feasible	Further HR needs analysis is essential because it currently lacks input from laboratory management staff and does not account for the expected annual increase in workload based on future demand forecasting.
HR Recruitment and Selection	Feasible	Further analysis of HR recruitment and selection planning is necessary because it currently consists of only broad points, lacking detailed and

Indicators	Results	Notes
		specific strategies that can be directly applied.
HR Training and Education	Feasible	Further analysis of HR education and training planning is needed because the current plan remains broad, lacking detailed and specific strategies, and is not immediately applicable. Additionally, it has not yet considered future input from laboratory management staff.
Budget Planning	Feasible	Further analysis of the HR management cost budget plan is necessary because the current plan has not yet taken into account input from laboratory management staff, particularly regarding future salaries and compensation packages.

Education and training programs for pathology laboratory staff should be tailored to address specific needs related to laboratory services and management, which align with the overall hospital management [23]. The HR management planning process in this aspect can start with a comprehensive assessment of staff skills and knowledge, identifying areas needing further training through surveys, interviews, and performance evaluations. Hospitals must allocate sufficient financial resources to support these education and training programs, as investing in laboratory staff development is crucial for keeping them updated on the latest advancements in anatomical pathology [24].

4.5 Feasibility Analysis of Legal Aspects

The feasibility assessment of the legal aspects in this research was conducted by analyzing literature studies and documentation from various official sources, including regulations, company documents, and other supporting materials. These documents provided insights into the feasibility of establishing anatomical pathology laboratory services at Jasa Kartini Hospital, Tasikmalaya. The findings were then confirmed and validated through interviews with research informants to ensure accuracy and applicability.

Jasa Kartini Hospital, originally established with the support of the Karsa Abdi Husada Foundation in 1996, began serving the Tasikmalaya community in 1997 and transitioned into a limited liability company (PT Karsa Abdi Husada) by 2003. The shift in ownership of Jasa Kartini Hospital to PT Karsa Abdi Husada is expected to enhance the hospital's performance while upholding humanitarian principles and social responsibility. The legal feasibility assessment in this research will focus on analyzing the completeness of licensing documents for both Jasa Kartini Hospital as the service provider and PT Karsa Abdi Husada as the owning legal entity. This ensures compliance with regulatory requirements and supports the hospital's continued operation in serving the community.

Table -5: Results of Feasibility Analysis of Legal Aspects

Indicators	Results	Notes
Legality of the Organizing Business Entity	Feasible	-
Legality of Business Activities	Feasible	Further analysis of the completeness of business activity licensing documents is needed because the current research focuses on the permits required for a medical laboratory, rather than those specifically regulating laboratories as supporting service installations in a hospital. This gap highlights the need for a more targeted review to ensure all relevant licenses are accounted for in the context of hospital-based anatomical pathology services.

This research focuses on the business activity of providing anatomical pathology examination services by establishing an anatomical pathology laboratory at Jasa Kartini Hospital, Tasikmalaya. Currently, no specific government regulations clearly address the licensing of anatomical pathology laboratories as hospital support installations. To develop comprehensive licensing indicators, the research will rely on general hospital licensing regulations, clinical laboratory operation licenses, and available guidelines to identify the necessary licenses for offering anatomical pathology services at Jasa Kartini Hospital.

At the time of this research, no clear provisions were found requiring a PB UMKU permit for anatomical pathology laboratory services as a supporting installation in hospitals. However, to ensure readiness in the licensing aspect, it is recommended that management process the permits during the investment phase. Specific requirements, obligations, and timelines can be found on the official OSS website. A further study is needed to fully understand the licensing requirements for operating an anatomical pathology laboratory within a hospital setting.

4.6 Feasibility Analysis of Environmental Impact Analysis Aspects

Waste identification with potential environmental impacts should be analyzed to create an effective response plan for reduction and control. All laboratory staff must understand good waste management principles, from sample reception to disposal. Strategies to enhance waste management in anatomical pathology laboratories include proper waste segregation, improved training on hazardous materials, resource optimization, and regulatory compliance [25]:

1. Develop and implement a comprehensive waste management plan covering separation, storage, transportation, and disposal of biohazardous waste, chemicals, and sharps in accordance with laws and guidelines.
2. Provide regular staff training on proper waste handling, disposal, and safety protocols to minimize environmental contamination risks.
3. Apply green chemistry principles to reduce hazardous chemical use, minimize waste, and implement recycling programs.
4. Adopt energy-saving practices, including using energy-efficient equipment and renewable energy to lower carbon emissions.
5. Collaborate with local environmental agencies and waste management facilities for regulatory compliance and access to proper disposal resources.

Table -6: Results of Feasibility Analysis of Environmental Impact Analysis Aspects

Indicators	Results	Notes
Potential Environmental Impact	Feasible	Further analysis of potential environmental impacts is necessary because the current identification only provides a general outline of impacts in laboratories or hospitals without detailed evaluation specific to the procurement of anatomical pathology laboratory installations. Additionally, it does not incorporate future input from laboratory staff involved in implementation.
Environmental Impact Management Plan	Feasible	Further analysis of environmental impact management plans is essential because the current mitigation strategies only outline general impacts associated with laboratories or hospitals without providing specific details relevant to the anatomical pathology laboratory installation. Additionally, the planning process has not incorporated future input from laboratory staff involved in implementation.

4.7 Feasibility Analysis of Financial Aspects

Further analysis of environmental impact management plans is essential because the current mitigation strategies only outline general impacts associated with laboratories or hospitals without providing specific details relevant to the anatomical pathology laboratory installation. Additionally, the planning process has not incorporated future input from laboratory staff involved in implementation.

Deficiencies in the forecasting process can affect the accuracy of results, with certain conditions leading to either underestimations (false low) or overestimations (false high). Specifically, shortfall conditions (1) and (2) may yield results lower than actual figures, while condition (3) may produce inflated forecasts. To enhance accuracy, re-forecasting should be conducted as new data becomes available. The unit selling price, derived from the researcher's analysis in the previous section, aligns with the projected consumer price index (CPI) increase in the health industry, averaging a 2.7% annual rise.

The feasibility analysis results for the financial aspects of this research align with findings from previous studies. State BM et al. (2023) reported a positive NPV of IDR 27,581,527,283, an IRR of 19.43% (exceeding 5.75%), a PI of 2.7 (greater than 1), and a payback period (PP) of 4 years and 5 months, significantly shorter than the 12.8 years planned for MRI equipment investment in a class B private hospital in Bandung City.

Table -7: Financial Aspect Feasibility Analysis Results

Indicators	Results	Notes
Net Present Value (NPV)	Feasible	The financial feasibility analysis results are influenced by the preceding analysis, as the calculations rely on the variable values determined earlier. This is further supported by the sensitivity analysis of each variable's impact on NPV, which is the primary indicator for assessing financial
Internal Rate of Return (IRR)	Feasible	

Profitability Index (PI)	Feasible	feasibility. Continuous calculations and reviews are essential, especially when researchers acquire updated data and information that may significantly affect the analysis results. Key variables to consider include unit selling price, variable costs (VC) per unit, number of units sold, equipment costs (base depreciation), fixed costs (non-VC), and NOWC.
Payback Period (PP)	Feasible	

In contrast, a study by [7] yielded unfavorable results, indicating that the investment was not feasible, with a negative NPV of -Rp. 1,279,905,141, an IRR of 0%, and a PI of -0.0174 for the procurement of C-Arm equipment in a hospital. The differing outcomes in business feasibility studies highlights that various variables can influence the final results. Researchers suggest that no feasibility study can serve as a perfect reference, as these studies involve the analysis and predictions of potential future scenarios. Therefore, the analysis of a business plan's feasibility should be continuously revisited, especially when new data and information that may affect the results become available.

4.8 Recommendations of Feasibility Analysis Results

The notes and recommendations from the results of this research, especially for hospital administrators, can be seen in the following table.

Table -8: Notes and Recommendations on Analysis Results

Feasibility Aspects	Catatan dan Rekomendasi
Market and Marketing Aspects	1. Once the service aimed at internal market segmentation is running well, targeting external market segmentation with a competent marketing strategy is crucial, as this can significantly boost production volume. 2. The complexity of the existing market structure may complicate market penetration efforts when targeting external segments, necessitating a robust marketing strategy. 3. It is essential to strengthen the marketing mix strategy. 4. Periodically adjust and re-analyze demand forecasts, taking into account demand from external market segmentation.
Technical and Operational Aspects	1. Re-analyze the plan to fulfill facilities and infrastructure, especially regarding technology and equipment and layout, taking into account input from laboratory expert staff and expert staff in the field of layout 2. Formulate strategies related to service distribution to reach wider market potential
Management and Human Resources Aspects	1. Immediately carry out talent scouting for the required laboratory staff, especially anatomical pathology specialists by considering the strategies that have been created 2. Restructuring HR management costs, especially those related to efforts to increase the attractiveness of anatomical pathology specialist doctors to make it easier to obtain the required staff candidates
Legal Aspects and AMDAL	Immediately arrange permits related to the operation of an anatomical pathology laboratory as a supporting installation in a hospital through OSS

5. CONCLUSION

The findings indicate that the investment for procuring an anatomical pathology laboratory is feasible across all seven assessed aspects. This positive evaluation suggests that the project aligns well with the hospital's strategic goals and has the potential to enhance the quality of diagnostic services offered to patients. The feasibility study highlights several key strengths of the investment, such as anticipated market demand, operational capacity, and projected financial performance. However, the research also outlines specific notes and recommendations for hospital management to consider. These may include addressing any identified gaps in infrastructure, ensuring compliance with legal and regulatory requirements, and implementing effective marketing strategies to promote the new services. Additionally, recommendations may involve ongoing staff training and development to maintain high service standards and responsiveness to patient needs. By taking these considerations into account, Jasa Kartini Hospital can better position itself for successful implementation and operation of the anatomical pathology laboratory, ultimately contributing to improved patient care and enhanced organizational performance in the healthcare landscape. Based on the investment feasibility analysis, Jasa Kartini Hospital's management is advised to advance their planning for the anatomical pathology laboratory procurement by targeting specific external market

segments, developing effective marketing strategies, and ensuring competent human resources. Additionally, further research should be conducted to evaluate the laboratory's impact on diagnostic quality, hospital image, and financial performance, along with analyzing factors influencing the investment plan's success to anticipate challenges and create effective strategies. These steps will enhance the establishment of the laboratory and improve the hospital's service offerings.

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