

Research Article

Navigating NGO Sustainability: Stakeholders, Operational Efficiency, and Innovation in Floating Hospitals

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Abstract: This study aims to evaluate the determinants of organizational sustainability within the Doctor Peduli Foundation (doctorSHARE), specifically regarding its Floating Hospital program. Specifically, it examines the influence of stakeholder support and operational efficiency on organizational sustainability, while analyzing the role of organizational innovation as a mediating variable in ensuring the continuity of medical services in remote areas. Employing a quantitative approach with a survey method, data were collected from 81 respondents comprising staff and volunteers directly involved in the Floating Hospital's operations. Structural Equation Modeling (SEM) was utilized to analyze the data and test the proposed hypotheses. The results reveal that stakeholder support does not have a significant direct impact on either organizational sustainability or innovation performance. Conversely, operational efficiency emerged as a dominant factor with a significant positive influence. Furthermore, organizational innovation was found to play a crucial role as a mediator, strengthening the impact of operational efficiency on organizational sustainability. This study concludes that the sustainability of non-profit organizations such as doctorSHARE is determined more by management's ability to optimize internal resources efficiently and innovatively than by reliance on external support. Consequently, strengthening internal operational systems should be a primary strategic priority to ensure long-term organizational existence.

Keywords: DoctorSHARE; Floating Hospital; Operational Efficiency; Organizational Innovation; Organizational Sustainability

1. Introduction

Healthcare services are a basic need that must be provided equitably; however, in Indonesia, disparities in access still exist, particularly in remote, island, and border areas. To address this challenge, the doctorSHARE Foundation introduced an innovative solution through Floating Hospitals, one of which is the Nusa Waluya 2 Floating Hospital that has been operating since 2018. This facility provides services comparable to land-based hospitals, including general treatment, major surgery, inpatient care, and emergency services. As a mobile, non-profit hospital operating on a barge, it plays a crucial role in reaching underserved populations with limited access to conventional healthcare facilities.

In its operations, the Floating Hospital faces various challenges, including limited funding, human resources, and logistical constraints. The sustainability of its services heavily depends on stakeholder support, which includes government bodies, communities, donors, volunteers, and institutional partners. Such support is not only financial but also includes policy, moral, and network assistance that strengthens organizational legitimacy. In addition, operational efficiency is essential to ensure that limited resources are managed optimally to deliver effective and sustainable healthcare services.

Beyond stakeholder support and operational efficiency, organizational innovation plays a key role in enhancing the adaptability of the Floating Hospital. Innovation includes the development of healthcare services, the use of digital technologies, and improvements in

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work systems and cross-sector collaboration. Through continuous innovation, the organization can improve service effectiveness while maintaining sustainability despite resource limitations and challenging geographical conditions.

Pre-survey results indicate that stakeholder support is at a moderate level (64.38%), although improvements are needed in communication and resource contribution. Organizational innovation is also relatively adequate (66.25%), but weaknesses remain in service improvement and workflow efficiency. Organizational sustainability is rated as moderate (63.13%), with notable gaps in workforce welfare and community impact. Meanwhile, operational efficiency shows the lowest score (53.75%), indicating that cost management, workforce utilization, and service responsiveness are still suboptimal.

Based on these findings, this study is important to examine the influence of stakeholder support and organizational innovation on the sustainability of the doctorSHARE Floating Hospital, as well as the mediating role of operational efficiency. The study is expected to provide a comprehensive understanding of the factors influencing the sustainability of mobile healthcare services and serve as a basis for strategic decision-making and organizational performance improvement.

2. Literature Review

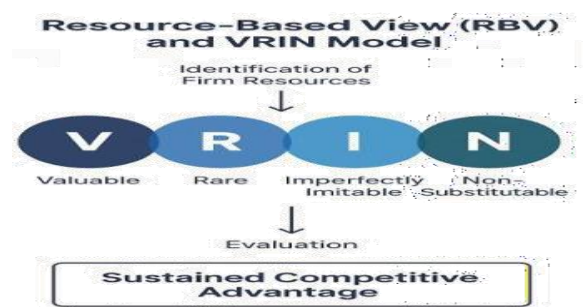


Figure 1. Resource-Based View Theory

Resource-Based View Theory

Resource-Based View (RBV) Theory is a strategic approach that emphasizes internal resources as the main source of sustainable competitive advantage. Introduced by Wernerfelt (1984) and further developed by Barney (1991) through the VRIN framework (Value, Rarity, Inimitability, and Non-substitutability), RBV explains that only unique and difficult-to-replicate resources can create long-term organizational value. Organizations are seen as bundles of physical and intangible assets, as well as capabilities that differentiate them from others. In service organizations such as hospitals, RBV is highly relevant as it highlights how internal resources such as medical equipment, human resource competencies, organizational culture, and management systems are managed effectively to achieve operational sustainability, particularly under conditions of limited resources and challenging environments.

Furthermore, RBV emphasizes the importance of organizational capabilities in integrating and coordinating resources to generate superior performance. The development of the VRIO framework (Value, Rarity, Imitability, Organization) reinforces the role of organizational structure, coordination systems, and culture in optimizing resource utilization. In the context of floating hospitals, operational efficiency reflects the effective management of these resources through innovations such as portable medical technology, digital systems, and adaptive service models. These capabilities not only enhance service effectiveness and efficiency but also support long-term sustainability. Thus, RBV provides a strong conceptual foundation for understanding how stakeholder support, organizational innovation, and operational efficiency interact to sustain healthcare organizations operating in complex and resource-constrained settings.

Sustainability Theory

Sustainability Theory, first introduced by De Rome & Meadows (1972), emphasizes the importance of balancing social, economic, and environmental responses to meet present needs without compromising future generations. This concept evolved into corporate sustainability, where organizations align business strategies with stakeholder interests while maintaining economic, social, and environmental balance—known as the triple bottom line (Elkington, 1998). The theory highlights that long-term development must consider ecological limits, social equity, and sustainable economic growth.

The concept was further strengthened by the World Commission on Environment and Development (1987), which defined sustainable development as a holistic process integrating material needs, social welfare, and environmental preservation. Scholars such as Enders & Remig (2014) emphasized intergenerational equity and the need for interdisciplinary approaches, combining economic, social, technological, and ecological perspectives. Sustainability is thus viewed as a complex and interconnected system that requires synergy across sectors and institutions.

Additional perspectives, such as ecological footprint theory (Rees & Wackernagel, 2008), provide measurable indicators of human impact on the environment, reinforcing the need to maintain ecological balance. Contemporary scholars highlight sustainability as an adaptive and ethical process that requires responsible resource use, systemic innovation, and organizational transformation (Ruggerio, 2021). This underscores that sustainability is not static but requires continuous adjustment to environmental and social changes.

In the context of this study, Sustainability Theory offers a framework for understanding the long-term viability of floating hospitals through the integration of social, economic, and environmental dimensions. Social sustainability is reflected in stakeholder support, economic sustainability in efficient resource management, and environmental sustainability in minimizing ecological impact. Operational efficiency acts as a mediating factor that links stakeholder support and organizational innovation to sustainability. Therefore, achieving sustainability requires not only financial stability but also continuous innovation, strong stakeholder engagement, and responsible management aligned with long-term ethical and environmental principles.



Figure 2. Sustainability Theory

Stakeholder Theory

Stakeholder Theory is a key framework in management and accounting that emphasizes organizational success is not solely determined by profit generation, but also by the ability to meet the needs of various stakeholders. Introduced by Freeman (2010), this theory highlights value creation for all stakeholders including employees, customers, suppliers, governments, and communities within a complex network of relationships where each party influences organizational outcomes.

Stakeholders are commonly categorized into primary and secondary groups (Clarkson, 1995). Primary stakeholders, such as employees, investors, suppliers, and customers, are essential for organizational survival, while secondary stakeholders influence or are influenced by the organization without direct involvement. According to Donaldson & Preston (1995), Stakeholder Theory provides guidance on governance structures and managerial practices that support ethical and balanced stakeholder relationships.

In the healthcare sector, this theory is particularly relevant as organizational sustainability depends on maintaining ethical, long-term relationships with stakeholders (Freeman, 2010a). Strong stakeholder engagement enhances legitimacy, resource access, and operational effectiveness (Jones & Wicks, 1999). Additionally, the theory integrates economic and social dimensions, encouraging organizations to manage stakeholder relationships strategically to create shared value.

In the context of floating hospitals, stakeholders include donors, medical personnel, local communities, volunteers, and government partners, each with distinct roles and expectations. Effective stakeholder support can drive innovation and improve operational efficiency, ultimately contributing to organizational sustainability. Therefore, Stakeholder Theory provides a fundamental conceptual basis for analyzing how stakeholder support influences sustainability, with operational efficiency acting as a mediating factor.

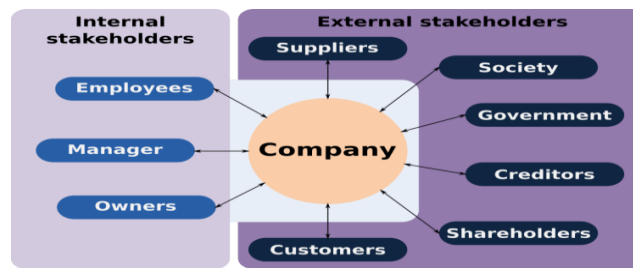


Figure 3. Stakeholder Theory

Organizational Sustainability

Organizational sustainability is a concept that emphasizes the importance of effectively managing resources to meet present needs without compromising the ability of future generations to meet their own needs. According to Barbier (1987), sustainability is a development process that integrates economic, social, and environmental aspects in a balanced manner. This implies that organizational success is not solely measured by economic growth, but also by its ability to maintain social equity and environmental preservation in the long term.

From a modern organizational perspective, sustainability requires the integration of these three dimensions into strategy and decision-making processes (Schaltegger & Wagner, 2017). In the hospital sector, this concept reflects the organization's ability to continuously provide high-quality healthcare services without compromising workforce welfare, financial stability, or environmental sustainability. Therefore, hospital sustainability extends beyond financial performance to include social value and environmental responsibility.

The Triple Bottom Line concept Elkington (1998) serves as the primary framework for assessing organizational sustainability, encompassing three key dimensions: economic (profit), social (people), and environmental (planet). In the hospital context, the social dimension relates to service quality and equitable access to healthcare, the environmental dimension focuses on resource management and ecological impact, while the economic dimension emphasizes financial stability and operational efficiency. These three dimensions must be balanced to achieve long-term sustainability.

Furthermore, hospital sustainability is influenced by the organization's ability to manage resources effectively and adaptively. Challenges such as limited budgets, high operational costs, and the need for advanced medical technologies require efficient and innovative management strategies. Optimal management of human resources, finances, and facilities is essential to ensure the continuity and quality of healthcare services over time.

Various theories explain the factors influencing hospital sustainability. The Resource-Based View (Barney, 1991) highlights the importance of unique internal resources, Stakeholder Theory (Freeman, 2010) emphasizes managing relationships with stakeholders, and Dynamic Capabilities Theory (Teece et al., 1997) focuses on the organization's ability to adapt to environmental changes. These perspectives indicate that sustainability is shaped not only by internal factors but also by how effectively organizations respond to external dynamics.

Based on the above discussion, hospital sustainability can be defined as the ability of an institution to maintain its operations and service quality consistently through effective resource management, innovation, and stakeholder support. In this study, sustainability is measured using three main dimensions environmental, social, and economic/operational which collectively reflect the organization's success in achieving long-term sustainability.

Organizational Innovation

Organizational innovation is a critical element in modern management that enables organizations to adapt, survive, and improve performance in dynamic environments. It is generally defined as a systematic process involving the creation, development, and implementation of new ideas or methods that enhance effectiveness, efficiency, and adaptability. Poole & de Ven (2004) describe innovation as a dynamic and continuous process that includes idea initiation, development, implementation, and institutionalization within organizational culture. Similarly, Yin (2009) emphasizes that innovation is not merely about generating new ideas, but about how these ideas are adopted, applied, and integrated into organizational structures and practices.

Organizational innovation can be conceptualized through three main dimensions: idea generation, idea promotion, and idea implementation. Idea generation refers to the organization's ability to encourage creativity and develop new solutions to improve services and workflows. Idea promotion involves the process of gaining support and commitment from individuals or groups to advance innovative ideas within the organization. Meanwhile, idea implementation reflects the organization's capability to apply and integrate innovative ideas into actual practices, systems, or services to achieve organizational improvement and effectiveness. Idea promotion involves gaining support and disseminating ideas within the organization, which is strongly influenced by leadership and organizational culture. Meanwhile, idea implementation represents the organization's capability to transform innovative ideas into structured practices that improve service quality, efficiency, and operational effectiveness.

In a broader perspective, Yin (2009) outlines five dimensions of organizational innovation: structural, process, resource, contextual, and outcome dimensions. The structural dimension relates to how organizational design supports innovation, while the process dimension includes stages such as initiation, adoption, implementation, and institutionalization. The resource dimension highlights the importance of human, financial, and technological support, while the contextual dimension focuses on leadership, culture, and external environment. Finally, the outcome dimension evaluates the impact of innovation on organizational performance, efficiency, and effectiveness.

According to OECD (2018), organizational innovation includes the implementation of new or significantly improved products or services, processes, and organizational or relational methods. These are categorized into three dimensions: product/service innovation, which enhances service quality and relevance; process innovation, which improves efficiency and workflow; and relational innovation, which strengthens communication and collaboration with stakeholders. This perspective emphasizes that innovation is not limited to technology but also includes managerial and structural improvements.

Various factors influence organizational innovation, including policy and regulatory support, transformational leadership, human resource capacity, technology and digitalization, and stakeholder participation. Additionally, internal and external factors such as resource availability, managerial capability, collaboration networks, environmental dynamics, and user needs play significant roles (OECD, 2018). Therefore, organizational innovation can be synthesized as the ability of an organization to systematically implement continuous improvements that enhance efficiency, effectiveness, and overall performance, while strengthening competitiveness and long-term sustainability.

Stakeholder Support

Stakeholders are defined as individuals or groups who have an interest in and can influence or be influenced by organizational activities (Freeman, 2010b). Stakeholder support includes financial, moral, logistical, and policy contributions from various parties such as government, communities, donors, medical personnel, and volunteers. According to Svendsen (1998), stakeholder theory emphasizes not only identifying relevant stakeholders but also building long-term collaborative relationships to create mutual value. This perspective shifts the traditional transactional approach toward a more strategic partnership model, where trust, communication, and shared goals become essential for organizational success and sustainability.

Bryson (2018) further explains that stakeholders play a critical role in shaping organizational outcomes, particularly in public and non-profit sectors. Organizations must be able to identify, analyze, and engage stakeholders effectively to enhance legitimacy, accountability, and program effectiveness. Similarly, Solomon (2020) highlights that stakeholders such as employees, customers, suppliers, governments, and communities have legitimate expectations that must be considered in decision-making processes. This broader responsibility reflects a shift from profit-oriented management to long-term value creation that incorporates ethical and social considerations.

In the context of sustainability, stakeholder engagement is considered a core principle of organizational accountability. Strong stakeholder support is built through inclusive identification of stakeholders, active engagement in organizational processes, and transparent communication regarding organizational performance and impacts. Effective stakeholder engagement enables organizations to strengthen trust, improve collaboration, and enhance long-term sustainability and organizational performance. These dimensions ensure that organizations maintain trust and legitimacy while aligning their operations with stakeholder

expectations. Effective stakeholder involvement also reduces conflict, strengthens cooperation, and enhances the relevance of organizational programs.

Based on these perspectives, stakeholder support can be synthesized as the organization's ability to build systematic, transparent, and sustainable relationships with stakeholders through active engagement, responsiveness, and accountability. In this study, stakeholder support is measured using three main dimensions: stakeholder inclusiveness, stakeholder engagement, and transparency & accountability. These dimensions collectively reflect how well the organization manages stakeholder relationships to achieve trust, legitimacy, and long-term sustainability.

Operational Efficiency

Operational efficiency refers to an organization's ability to optimize the use of resources to produce maximum output with minimal input without compromising quality and time. According to Gupta and Starr (2014) and Heizer et al. (2020), operational efficiency is achieved when processes run without waste, service time is reduced, and productivity is improved. This concept is not only focused on cost reduction but also on value creation through process improvement, standardization, and the use of technology. In a modern context, operational efficiency also reflects an organization's ability to adapt to changes and to execute processes in a fast, accurate, and integrated manner.

The dimensions of operational efficiency can be viewed from several key aspects. Heizer et al. (2020) classify them into technical efficiency, allocative efficiency, and dynamic efficiency. Technical efficiency refers to the ability to produce maximum output from a given set of inputs, allocative efficiency emphasizes the optimal allocation of resources to the most value-adding activities, and dynamic efficiency reflects the organization's ability to continuously improve through innovation and adaptation over time. These dimensions are further supported by other perspectives such as process efficiency, waste reduction, and time efficiency, which highlight the smoothness and speed of service delivery.

Operational efficiency is influenced by various factors, including managerial and operational aspects. The quality of decision-making, leadership style, and organizational structure are important factors that influence organizational effectiveness and performance. Effective decision-making enables organizations to respond appropriately to challenges and opportunities, while an appropriate leadership style can motivate employees and strengthen teamwork. In addition, a well-structured organization supports coordination, communication, and the achievement of organizational goals efficiently, while Heizer et al. (2020) highlight capacity planning, inventory management, and operational scheduling. In the healthcare context, factors such as the availability and competence of human resources, hospital information systems (HIS), and service governance also play a critical role. Therefore, operational efficiency can be synthesized as the organization's ability to systematically manage and integrate all operational processes to deliver optimal outputs using minimal resources, cost, and time, which in this study is measured through technical, allocative, and dynamic efficiency.

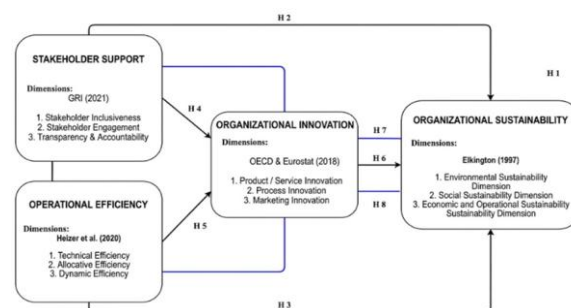


Figure 4. Conceptual Framework

3. Proposed Method

This study employs an explanatory research design aimed at examining the relationships and effects among variables, specifically stakeholder support (X1) and operational efficiency (X2) on hospital sustainability (Y), with organizational innovation as an intervening variable (M) (Sugiyono, 2019). A quantitative survey method is used, where data are collected through structured questionnaires distributed online via Google Forms, consistent with the quantitative approach that utilizes instruments and statistical analysis to test hypotheses (Sugiyono, 2019). The population includes all staff, management, medical and non-medical personnel, as

well as volunteers involved in the operations of the doctorSHARE Floating Hospital, defined as all entities relevant to the research focus. The sampling technique applied is saturated sampling (census), involving 82 respondents who meet the inclusion criteria. Data sources consist of primary data obtained through questionnaires, which are effective for measuring attitudes, beliefs, behaviors, and individual characteristics (Siregar, 2013), as well as secondary data from internal organizational documents. Data measurement uses a 4-point Likert scale (forced-choice) to avoid neutral responses and ensure clearer perception measurement, with statistical analysis conducted to test the proposed hypotheses.

4. Results and Discussion

Respondent Characteristics

In this study, the respondents were predominantly female, with 46 individuals (56.79%) compared to 35 males (43.21%). Based on age distribution, most respondents were in the 31–40 years group, totaling 38 people (46.91%), followed by those aged 20–30 years with 30 people (37.04%), 41–50 years with 8 people (9.88%), and over 50 years with 5 people (6.17%). In terms of education level, the majority of respondents held a bachelor's degree (S1) with 52 people (64.20%), followed by master's degree (S2) holders with 14 people (18.52%), diploma (D3) with 13 people (16.05%), and doctoral degree (S3) with 1 person (1.23%). Regarding organizational status within YDP, most respondents were staff members, totaling 52 people (64.20%), while 29 people (35.80%) were volunteers. Based on length of involvement or work experience, the largest group had more than 1 year of involvement with 34 people (41.98%), followed by 3–5 years with 29 people (35.80%), 5–10 years with 14 people (18.25%), and more than 10 years with 3 people (3.70%).

Validity Test

Based on the validity test results for all research variables—stakeholder support, operational efficiency, organizational innovation, and organizational sustainability—it is found that all statement items are valid. The test was conducted on 30 respondents ($df = 28$) using the criterion $r\text{-count} > r\text{-table}$ of 0.361 at $\alpha = 0.05$ (two-tailed test). The $r\text{-count}$ values for stakeholder support ranged from 0.381 to 0.889, operational efficiency from 0.408 to 0.765, organizational innovation from 0.706 to 0.895, and organizational sustainability from 0.587 to 0.812. All items also showed significance values (Sig. 2-tailed) below 0.05, indicating that they meet the validity criteria. Therefore, all research instruments are considered valid and appropriate for data collection and further analysis.

Reliability Test

Tabel 1. Reliability Test

Variable	Cronbach's Alpha	Description
Stakeholder Support	0.877	Reliabel
Operational Efficiency	0.822	Reliabel
Organizational Innovation	0.917	Reliabel
Organizational Sustainability	0.899	Reliabel

Source: Results of Primary Data Analysis, 2026

Based on the table above, the results of the research instrument reliability test on a pilot study with 30 respondents indicate that all variables had Cronbach's alpha values above 0.70. The stakeholder support variable achieved a Cronbach's alpha value of 0.877, operational efficiency 0.822, organizational innovation 0.917, and actual behavior 0.899. Referring to the reliability criteria, which state that a Cronbach's alpha value ≥ 0.70 indicates good internal consistency, all constructs in this research questionnaire are deemed reliable. Therefore, the items in each variable are able to consistently measure the same construct and are suitable for use in primary data collection ($N = 81$).

Hypothesis Test

Hypothesis Testing Results – The research data were processed using SmartPLS.

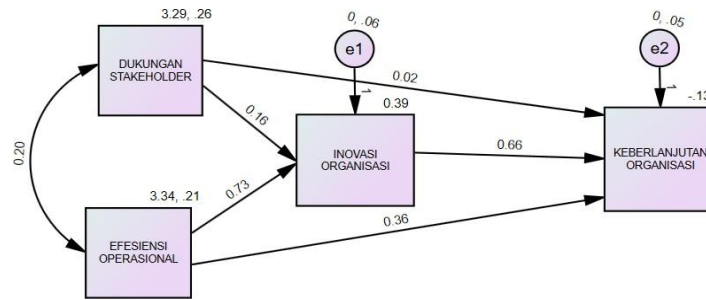


Figure 5. Research Model

The figure above shows valid item results with a statistical T value of ≥ 1.96 . This shows that patient involvement, self-efficacy, and accessibility significantly influence the quality of life of hemodialysis patients.

Simultaneous Test

In SEM AMOS analysis, simultaneous testing is assessed through model fit (Goodness of Fit) and the coefficient of determination (Squared Multiple Correlations). The results show that the model meets all Goodness of Fit criteria with a perfect fit, indicated by a probability value of 0.868 (> 0.05) and a CMIN/DF value of 0.027 (< 2.00), confirming that the theoretical model is highly consistent with empirical data. Furthermore, the R^2 value for Organizational Sustainability is 0.821, meaning that Stakeholder Support, Operational Efficiency, and Organizational Innovation collectively explain 82.1% of the variance, while the remaining 17.9% is influenced by other variables the model. Therefore, with a significant model probability and strong predictive power, Hypothesis 1 (H1) is accepted, indicating that the sustainability of the Floating Hospital is strongly determined by the synergy of stakeholder support, operational efficiency, and continuous organizational innovation.

Partial Hypothesis

Tabel 2. Partial Hypotesis Test (irect Effect)

	β	S.E	C.R	P	Description
SS $\rightarrow$ OS	0,016	0,096	0,166	0,868	H2 Rejected
OE $\rightarrow$ OS	0.361	0,127	2,846	0,004	H3 Accepted
SS $\rightarrow$ OI	0,158	0,107	1,472	0,141	H4 Rejected
OI $\rightarrow$ OS	0,726	0,118	6,166	0,000	H5 Accepted
OI $\rightarrow$ OS	0,661	0,099	6.675	0,000	H6 Accepted

Source: Results of Primary Data Analysis, 2025

The hypothesis testing results indicate that stakeholder support does not have a significant direct effect on organizational sustainability or organizational innovation. This is evidenced by the statistical results where H2 ($P = 0.868$) and H4 ($P = 0.141$) are rejected, meaning that variations in stakeholder support do not directly influence sustainability or innovation within the doctorSHARE organization. These findings suggest that external support alone is insufficient to drive sustainability or innovation, and that other internal organizational factors may play a more dominant role.

In contrast, operational efficiency and organizational innovation show significant positive effects. H3 confirms that operational efficiency significantly influences organizational sustainability ($\beta = 0.361$; $P = 0.004$), while H5 demonstrates that operational efficiency has a very strong effect on organizational innovation ($\beta = 0.726$; $P < 0.001$). Furthermore, H6 indicates that organizational innovation significantly contributes to sustainability ($\beta = 0.661$; $P < 0.001$). These results highlight that sustainability is primarily driven by internal

capabilities, particularly efficiency and innovation, with innovation acting as a key pathway in strengthening long-term organizational sustainability.

Indirect Effect Hypothesis Test

Tabel 3. Indirect Effect Hypothesis Test

	<i>T Statistics</i>	<i>P Values</i>	Description
SS → OI → OS	1.441	0,1493	H7 Rejected
OE → OI → OS	4.524	0,000	H8 accepted

The results of hypothesis testing show that organizational innovation does not mediate the relationship between stakeholder support and organizational sustainability, as the indirect effect is not significant due to the non-significant influence of stakeholder support on innovation. This suggests that in organizations like doctorSHARE, stakeholder support tends to be operational and transactional focused on immediate service delivery rather than driving innovation so innovation is primarily shaped by internal capabilities rather than external influence. In contrast, organizational innovation significantly mediates the effect of operational efficiency on sustainability with a partial mediation effect, meaning efficiency not only directly improves sustainability but also enhances it further through innovation. This finding supports the Resource-Based View (RBV), where efficient operations create “slack resources” such as time and budget that enable innovation. Ultimately, while efficiency alone helps maintain current operations, its transformation into innovation such as improved service methods, digital systems, and streamlined processes becomes the key driver of long-term sustainability and organizational adaptability.

Discussion

The results of simultaneous hypothesis testing confirm that stakeholder support, operational efficiency, and organizational innovation collectively have a positive and significant effect on organizational sustainability. This finding indicates that the sustainability of a non-profit healthcare organization cannot rely on a single factor, but rather emerges from the integration of external and internal elements. External factors include financial, moral, and collaborative support from stakeholders, while internal factors involve the organization's ability to optimize limited resources and continuously create service innovations. This result is consistent with previous studies emphasizing the importance of multi-factor sustainability drivers.

Based on the Three Box Method analysis, all variables in this study are consistently categorized at a high level, indicating strong and mutually reinforcing characteristics. Stakeholder support that is managed synergistically, combined with optimal operational efficiency, provides strategic space for organizations to generate adaptive innovation. The interaction of these three elements ultimately leads to resilient organizational sustainability. This finding reflects the ability of doctorSHARE's management to build a strong operational system in responding to healthcare challenges in remote areas (O'Reilly & Tushman, 2021).

From a theoretical perspective, these findings strongly support the Resource-Based View (RBV) proposed by Barney (1991), which emphasizes that organizational sustainability depends on the effective orchestration of resources. In this study, stakeholder support functions as a relational resource, operational efficiency as a core capability, and innovation as a dynamic capability. The integration of these elements creates a unique competitive advantage that supports long-term sustainability, in line with sustainability theory.

However, partial testing shows that stakeholder support does not have a significant direct effect on organizational sustainability. This indicates that high levels of donations, volunteer participation, and stakeholder collaboration do not automatically guarantee long-term organizational survival. This finding supports the RBV perspective that resources must be transformed into internal capabilities to create value (Barney, 1991).

From a managerial standpoint, stakeholder support can be seen as a potential resource rather than a direct determinant of sustainability. Although stakeholder engagement is high, its impact remains passive if not properly managed and transformed into operational improvements or innovation. This suggests that organizations must actively convert external support into internal value to achieve sustainability.

This phenomenon reflects the real operational conditions of doctorSHARE, where external support mainly functions as operational input such as funding, logistics, and medical personnel. Without strong internal systems, these resources cannot ensure sustainability. Therefore, organizations must avoid dependency on external support and focus on building independent and efficient internal systems.

In contrast, operational efficiency has a positive and significant effect on sustainability, confirming that effective resource management directly contributes to organizational continuity. Efficient allocation of time, cost, and human resources enables organizations to maintain performance and service quality, especially in dynamic healthcare environments (Heizer et al., 2020).

Further analysis shows that operational efficiency creates slack resources, which provide flexibility for innovation and long-term planning. By minimizing waste and optimizing processes, organizations gain additional capacity that can be used for future development. This concept aligns with the theory of organizational slack proposed by Cyert & March (2020).

The study also finds that stakeholder support does not significantly influence organizational innovation. This suggests that external contributions are primarily used for routine operational needs rather than innovation development. In the context of remote healthcare services, resources are often focused on survival rather than experimentation, indicating a transactional rather than collaborative stakeholder relationship (Svendsen, 1998).

On the other hand, operational efficiency has a strong and significant effect on innovation. Efficient systems encourage organizations to eliminate ineffective processes and adopt new methods, creating a cycle of continuous improvement. This finding supports the concept of frugal innovation, where innovation arises from resource constraints (Tiwari & Herstatt, 2012).

Organizational innovation is also proven to have a strong positive effect on sustainability, indicating that the ability to continuously adapt and renew organizational processes is essential for long-term survival. This finding aligns with Schumpeter's concept of creative destruction, which emphasizes the importance of innovation in maintaining competitiveness.

Regarding mediation, organizational innovation does not mediate the relationship between stakeholder support and sustainability. This occurs because stakeholder support does not significantly influence innovation, resulting in a disconnected mediation pathway. This finding suggests that stakeholder relationships remain transactional and have not yet evolved into collaborative partnerships that foster innovation.

In contrast, organizational innovation partially mediates the relationship between operational efficiency and sustainability. This indicates that operational efficiency influences sustainability both directly and indirectly through innovation. Efficiency generates resources that enable innovation, which in turn strengthens long-term sustainability.

Overall, these findings confirm that sustainability in doctorSHARE is primarily driven by internal capabilities, particularly operational efficiency and innovation, rather than external support alone. The integration of efficiency and innovation creates a strong foundation for organizational resilience, demonstrating that sustainable organizations are those that are not only resourceful but also adaptive and innovative (Teece et al., 1997).

5. Comparison

The findings reveal a clear contrast between external and internal drivers of organizational sustainability. While stakeholder support, operational efficiency, and organizational innovation collectively have a significant and positive simultaneous effect on sustainability, stakeholder support alone does not exert a direct or significant influence. This indicates that external resources such as funding, volunteer participation, and partnerships function primarily as relational resources rather than decisive determinants of long-term sustainability. In line with the Resource-Based View (RBV) proposed by Barney (1991), resources alone do not create sustained advantage unless they are effectively orchestrated through internal capabilities. This finding indicates that stakeholder inclusiveness alone is not sufficient to ensure organizational sustainability. Without strong internal transformation mechanisms, external support may only contribute at an operational level rather than creating strategic organizational value. Therefore, sustainability is determined not merely by the amount of support received, but by the organization's ability to manage, integrate, and transform that support into long-term value and organizational improvement.

In contrast, internal capabilities particularly operational efficiency and organizational innovation show strong, significant, and interrelated effects on sustainability. Operational efficiency not only directly enhances sustainability but also strongly drives innovation, which in turn becomes a critical mediator (partial mediation effect). This confirms that efficiency generates slack resources (Cyert & March, 2020) that enable organizations to innovate and adapt. Moreover, innovation emerges as the most strategic factor, acting as the “engine” of long-term sustainability, consistent with theories of dynamic capabilities (Teece et al., 1997) and creative destruction (Schumpeter, 2013). Unlike stakeholder-driven inputs, innovation in this context is predominantly inside-out, shaped by internal discipline and strategic direction rather than external pressure. Therefore, the comparison highlights a key insight: external support sustains operations, but internal efficiency and innovation sustain the future rather than through isolated effects.

6. Conclusions

The study concludes that stakeholder support, operational efficiency, and organizational innovation simultaneously exert a strong and significant influence on organizational sustainability at doctorSHARE, highlighting that sustainability is built through the synergy of external support and internal capabilities. However, partially, stakeholder support does not have a significant direct effect on sustainability nor on innovation, indicating that external contributions such as donations, partnerships, and volunteer involvement do not automatically ensure long-term continuity unless they are effectively managed within strong internal systems. In contrast, operational efficiency demonstrates a significant positive effect on sustainability, emphasizing that disciplined resource management, cost optimization, and effective service delivery provide the stability and residual resources necessary for organizational endurance.

Furthermore, operational efficiency is proven to have a very strong and significant impact on organizational innovation, while innovation itself significantly enhances sustainability, positioning it as a critical driver of long-term success. Innovation also partially mediates the relationship between operational efficiency and sustainability, meaning that efficiency yields greater strategic value when transformed into innovative practices. Conversely, innovation does not mediate the effect of stakeholder support on sustainability, suggesting that external support has not yet been effectively converted into innovation. Overall, these findings underline that innovation acts as a key catalyst, where sustainability is best achieved not merely through efficiency or external support alone, but through the organization’s ability to transform internal strengths into continuous innovation.

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