“Service-driven capabilities as competitive advantage drivers: Evidence from Indonesian healthcare organizations”

AUTHORS	Kristiana Susilowati Lieli Suharti Agus Sugiarto

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Kristiana Susilowati (Indonesia), **Lieli Suharti** (Indonesia), **Agus Sugiarto** (Indonesia)

SERVICE-DRIVEN CAPABILITIES AS COMPETITIVE ADVANTAGE DRIVERS: EVIDENCE FROM INDONESIAN HEALTHCARE ORGANIZATIONS

Abstract

The traditional way of differentiating services has reduced in a saturated market under Indonesia's National Health Insurance, increasing competition across the health care sector. The objective of this study is to examine how organizational resources convert into sustainable competitive advantage when mediated by service capabilities, in Indonesian health care organizations. Data were collected through a self-administered survey from March to June 2023, from 158 accredited hospitals in Central Java, Indonesia. The data were analyzed using structural equation modeling with partial least squares (SEM-PLS).

The findings indicate that serving culture has an indirect influence on competitive advantage through service capabilities, and serving culture has no direct influence on competitive advantage. Service capabilities are a full mediator between serving culture and competitive advantage, while strategic HRM and workplace spirituality are partial mediators through service capabilities. All models exhibited strong explanatory power, and predictive relevance for service capabilities and competitive advantages. Hospital administrators may be able to take the results of this study, and create formal service capabilities to advance competitive positioning in Indonesia's changing healthcare environment. The findings of this study confirm that intangible organizational resources should be operationalized through formal service capabilities to create sustainable business value, especially in standardized environments, where conventional forms of differentiation may not work. This paper adds to the understanding of how healthcare organizations can leverage their internal resources to achieve sustained competitive advantage in increasingly regulated and standardized environments.

Keywords capability, competition, culture, healthcare, hospital, mediation, service, strategy, Indonesia, value

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Kristiana Susilowati, Doctor, Lecturer, Management Study Program, Faculty of Economics and Business, Karya Husada University Semarang, Indonesia. (Corresponding author)

Lieli Suharti, Ph.D., Professor, Faculty of Economics and Business, Satya Wacana Christian University Salatiga, Indonesia.

Agus Sugiarto, Doctor, Professor, Faculty of Economics and Business, Satya Wacana Christian University Salatiga, Indonesia.

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INTRODUCTION

Indonesia's healthcare sector confronts unprecedented competitive challenges as market dynamics fundamentally reshape organizational strategies and operational frameworks. Healthcare providers increasingly compete for patients, skilled personnel, and financial resources within an environment characterized by policy-driven standardization and evolving patient expectations. Such competitive intensity has generated serious strategic challenges for healthcare organizations seeking sustainable differentiation in markets where traditional competitive advantages prove insufficient.

Indonesia's healthcare landscape has undergone substantial transformation, with hospital numbers increasing from 2,813 in 2018 to over 3,000 in 2022, creating an increasingly saturated market environment. Simultaneously, the National Health Insurance program (JKN) implementation introduced standardized treatment protocols and reim-

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bursement rates, effectively constraining price-based competition and clinical service differentiation strategies. The convergence of heightened competition and standardized regulations raises a critical strategic question: how can healthcare institutions develop sustainable competitive advantages when traditional differentiators become obsolete or inadequate?

The research problem centers on limited empirical understanding of how intangible organizational resources can be systematically transformed into tangible competitive advantages within healthcare contexts. Specifically, insufficient knowledge exists regarding the mechanisms through which workplace spirituality, HR practices, and organizational culture influence competitive positioning in standardized healthcare markets. This issue becomes particularly acute in developing nations such as Indonesia, where healthcare organizations must navigate complex regulatory frameworks while competing for market share in increasingly standardized service offerings.

Contemporary healthcare management faces a fundamental challenge: identifying and developing non-replicable sources of competitive advantage in environments where conventional differentiation strategies prove inadequate. The scientific challenge involves understanding the organizational processes and capabilities that enable healthcare organizations to transform investments in culture and human resources into measurable competitive outcomes, particularly under regulatory frameworks that constrain traditional competitive strategies.

1. LITERATURE REVIEW AND HYPOTHESES

Organizational culture represents a fundamental factor influencing healthcare performance, encompassing shared values, beliefs, and behavioral norms that impact organizational effectiveness (Almutairi et al., 2022). Contemporary research emphasizes culture's multifaceted nature, particularly regarding its influence on organizational resilience, employee satisfaction, and patient care quality. Systematic reviews of organizational culture reveal its pervasive influence across various organizational dimensions and performance outcomes (Bogale & Debela, 2024). The healthcare sector presents unique cultural considerations due to its mission-driven nature and the critical importance of patient outcomes.

The concept of serving culture becomes particularly relevant in healthcare environments, where organizational missions naturally align with service-oriented values. Serving culture refers to organizational characteristics marked by shared commitment to prioritizing stakeholder needs over self-interest (Liden et al., 2014). Healthcare administrators benefit strategically from this cultural orientation through enhanced operational coordination, reduced staff turnover, increased employee engagement, and improved patient satisfaction. Recent systematic literature reviews demonstrate servant leadership's critical role in healthcare organizations, showing how leaders who prioritize others' needs cultivate cultures that enhance employee satisfaction and patient care quality (Demeke et al., 2024).

According to Barney (1991), serving culture constitutes an intangible resource meeting the requirements for sustainable competitive advantage: valuable, rare, unique, and non-substitutable. Research on organizational culture in healthcare settings consistently demonstrates that cultural factors significantly impact organizational performance and patient safety outcomes (Qin et al., 2023). Furthermore, studies reveal strong positive correlations between organizational culture and employee well-being, with culture serving as a vital resource for both employee wellness and patient safety outcomes (Lu et al., 2022).

Strategic human resource management has evolved significantly within healthcare organizations, with contemporary frameworks emphasizing alignment between HR practices and organizational strategy to achieve competitive advantage (Jackson et al., 2014). Research demonstrates that effective SHRM implementation results in organizational excellence through systematic integration of human resource practices with strategic

objectives (Al-Jedaiah & Albdareen, 2020). Meta-analytical research shows that effective SHRM practices in healthcare organizations enhance employee commitment, engagement, and organizational performance through systematic human capital development and capability enhancement (Boon et al., 2019).

Healthcare-specific SHRM approaches acknowledge the unique characteristics of healthcare work, including high skill requirements, emotional demands, and patient interaction complexity (Jiang & Messersmith, 2018). Contemporary SHRM frameworks in healthcare emphasize sustainable practices that balance environmental concerns, employee well-being, and organizational performance objectives (Kailay & Paposa, 2024).

Research has established that strategic HR practices significantly impact organizational resilience, adaptability, and performance outcomes. The relationship between SHRM and organizational capabilities has been well-documented (Parayitam et al., 2021). Healthcare organizations implementing comprehensive SHRM systems demonstrate superior performance across multiple dimensions, including financial metrics, employee satisfaction, and clinical quality. Recent research indicates that organizational change processes serve as crucial mediating factors in converting HRM practices into performance outcomes, particularly in healthcare settings where change management proves essential for sustainable improvements (Rotea et al., 2023).

Workplace spirituality has attracted considerable attention in healthcare research due to its positive effects on patient care quality, organizational commitment, and employee well-being (Pawar, 2009; Rego & Pina e Cunha, 2008). Research emphasizes workplace spirituality's multifaceted nature, including meaningful work experiences, a sense of community, and alignment with organizational values (Barik & Nayak, 2024).

Studies demonstrate strong positive correlations between workplace spirituality and organizational citizenship behavior, with employees experiencing meaningful spiritual connections at work more likely to engage in discretionary helping behaviors (Munir et al., 2021). Healthcare work's inherently compassionate nature and significant impact on human lives provide unique opportunities for workplace spirituality implementation.

Employee engagement is related to workplace spirituality, as workplaces with a spiritual orientation have higher levels of personal commitment and involvement of healthcare workers (Saks, 2011). Foundational research identified the importance of workplace spirituality in healthcare environments and established its positive influence on organizational commitment and employees' attitudes toward work (Milliman et al., 2003). More recent research continues to verify these links and has found that workplace spirituality has a significant impact on employee job satisfaction through trust building (Hassan et al., 2016).

Spiritual dimensions lead to a variety of positive outcomes in healthcare organizations, including improved patient experiences, decreased burnout, and greater employee resilience. Theoretical frameworks have examined outcomes associated with workplace spirituality, and systematic reviews and meta-analyses have confirmed these findings, demonstrating that workplace spiritual interventions provide favorable outcomes for work-related health metrics (De Diego-Cordero et al., 2021).

Service capabilities represent an organization's formalized approaches to delivering superior service through specific competencies that enhance patient experiences and organizational performance (Karpen et al., 2015). Recent research has advanced the understanding of service capabilities in healthcare, highlighting their contribution to organizational differentiation and patient-centered care experiences.

Six service capabilities emerge as particularly relevant in healthcare contexts: relational interaction capabilities that build relationships through empathetic communication; ethical interaction capabilities that foster trust and transparency; individual interaction capabilities that customize service delivery to patient preferences; empowered interaction capabilities that enable staff discretion for patient benefit; concerted interaction capabilities that coordinate care across departments; and developmental interaction capabilities that continuously improve services through feedback and learning systems.

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Each capability contributes to enhanced patient experiences, reduced service gaps, improved problem resolution, increased patient loyalty, trust building, and enhanced service quality perceptions. These capabilities directly impact patient experience, operational effectiveness, and competitive positioning by translating organizational cultural values into practical business activities. Particular attention must be given to employee psychological states and organizational support systems to ensure service quality continuity during organizational transitions such as mergers or restructuring (Heine et al., 2022).

From a resource orchestration perspective, service-driven capabilities serve as mechanisms that mobilize and enact cultural resources for value creation (Koufteros et al., 2014). Service capabilities enable organizations to deliver service experiences that align with cultural values, thereby reflecting organizational identity in customer experiences. Contemporary organizational research emphasizes the importance of human factors and sustainable organizational practices in creating competitive advantage (Pfeffer, 2017). Dynamic capabilities theory highlights organizations' ability to integrate, develop, and reconfigure internal and external competencies in response to rapidly changing environments (Teece, 2007). Multi-level organizational analysis has gained significance in healthcare settings, particularly in understanding how learning health systems integrate insights from implementation science and organizational research (Harrison & Shortell, 2020).

Research demonstrates that organizational culture significantly impacts innovation capabilities, with open, collaborative, and continuous improvement cultures enhancing organizational innovation outcomes. Healthcare organizations with strong learning cultures exhibit improved performance and enhanced capability development through continuous knowledge acquisition and application.

The relationship between organizational culture and innovation proves particularly significant in healthcare settings, where organizations must continuously innovate to improve patient care while managing cost pressures and regulatory requirements. Contemporary research emphasizes organizational culture's systematic approach to performance improvement (Azeem et al., 2021). Literature reviews consistently demonstrate positive correlations between organizational culture and innovation, emphasizing how cultural factors support creative behavior and organizational adaptability (Hazem & Zehou, 2019). Understanding innovation management processes and their distinctive characteristics proves essential for healthcare organizations seeking to leverage cultural resources for competitive advantage (Yasini, 2016).

This study aims to examine how organizational resources transform into competitive advantage through service-driven capabilities mediation in Indonesian healthcare institutions, specifically investigating the mechanisms through which serving culture, strategic human resource management, and workplace spirituality influence competitive positioning.

The hypotheses developed in this paper are:

H1: Strategic human resource management has a direct positive effect on sustainable competitive advantage.

H2: Workplace spirituality has a direct positive effect on sustainable competitive advantage.

H3: Service-driven capability has a direct positive effect on sustainable competitive advantage.

H4: Strategic human resource management has a positive effect on service-driven capability.

H5: Workplace spirituality has a positive effect on service-driven capability.

H6: Strategic human resource management has a positive effect on sustainable competitive advantage through service-driven capability.

H7: Workplace spirituality has a positive effect on sustainable competitive advantage through service-driven capability.

Based on the theoretical framework and hypotheses developed above, the conceptual model for this study is presented in Figure 1.

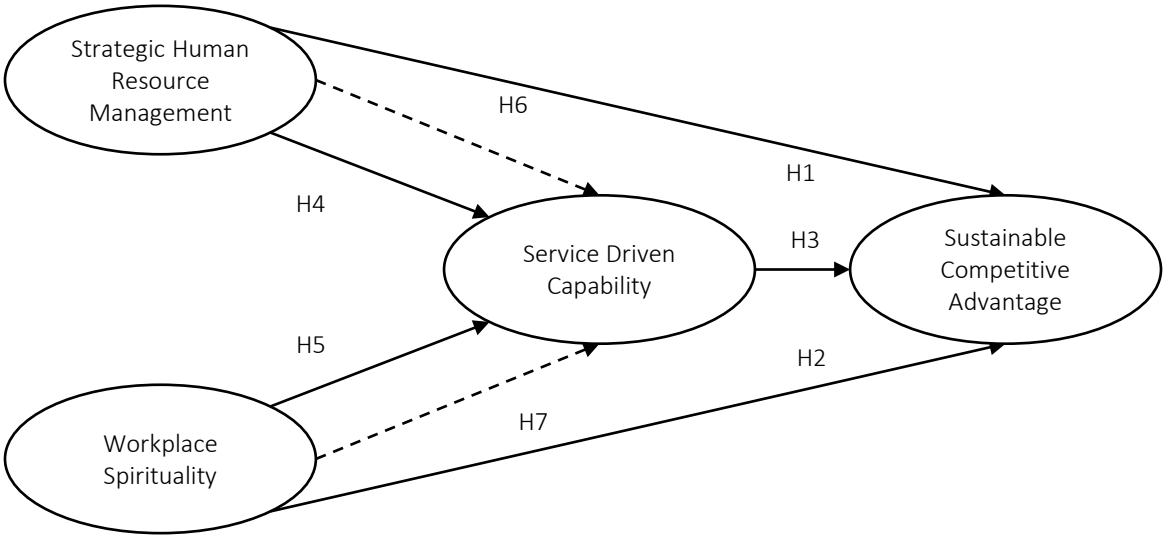

Figure 1. Conceptual model

2. METHODS

This study used a cross-sectional survey based on accredited hospitals in Central Java, Indonesia. Of 165 hospitals contacted, 158 participated, resulting in a response rate of 95.8%. Hospital management was selected via convenience sampling, based on competencies and position roles.

The sample consisted of Hospital Directors/CEOs (29.7%), Human Resources Directors (24.1%), Quality/Service Directors (22.2%), Medical Directors (14.6%), and Operations Directors (9.5%). The sampling frame for selection of participants consisted of those who met the inclusion criteria of having held a leadership position for more than three years, involvement in strategic planning, experience in leading an organizational change program, and were responsible for the study concepts (SHRM, service capabilities, competitive strategy), and had formal authority to act and speak on behalf of the policies of the hospital.

The inclusion criteria for hospitals were full KARS accreditation, functioning during the period of the study, evidence of a longer than three-year history of established practices, an operational hospital of a minimum of 50 beds to create organizational complexity, and identified management that qualified for the study participant sample. The exclusion criteria for selecting hospitals were hospitals in a restructuring phase, those that only had specialists and did not have general service community hospitals, or those for which the KARS accreditation documentation was incomplete.

Ownership was categorized as follows: foundations (59.87%), limited liability companies (28.03%), local government hospitals (9.55%), and government hospitals (2.55%). For specialist physicians, 48.10% of hospitals received 10–29, while 22.78% received 30–49 specialists. The bed occupancy ratio (BOR) for the first semester 2023 indicated that most hospitals were operating at average capacity levels – 31.65% of hospitals had a BOR of 60–69%, while 22.15% had a BOR of 50–59% capacity.

The study evaluated four constructs using established scales that were adapted for health care contexts. All constructs had multi-item scales using 5-point Likert responses (1= strong disagree to 5 = strongly agree): serving culture (2 dimensions; Liden et al., 2014), service-driven capabilities (6 dimensions; Karpen et al., 2015), sustainable competitive advantage (3 dimensions; Stefan et al., 2016), strategic human resource management (6 dimensions; Al-Jedaiah & Albdareen, 2020; Hamadamin & Atan, 2019), and workplace spirituality (3 factors; Rezapouraghdam et al., 2019).

Data were collected in a multi-stage process: hospital eligibility was first determined, the administration was then contacted, and then the respondents were identified and provided formal invitations. Respondents chose between online (60%) or face-

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to-face (40%) completion styles and took approximately 35–40 minutes to complete the survey. The quality assurance activities included the pilot tests with 30 hospitals, back-translation verification of the instrument in Indonesian, follow-ups with non-respondents, and checks for completeness.

Data analysis employed structural equation modeling with partial least squares (SEM-PLS) using SmartPLS 4.0 software. The hierarchical component model followed a two-stage process that began by examining the measurement model of lower-order constructs and then relationships between the higher-order constructs. The reflective measurement model assesses the indicator reliability, internal consistency, convergent validity, and discriminant validity. The structural model assesses the path coefficients, R^2, effect sizes, predictive relevance, and mediation effects using bootstrapping at 5,000 resamples.

3. RESULTS AND DISCUSSION

The assessment of the measurement model began with an evaluation of indicator reliability. Table 1 presents the outer loadings of all indicators on their respective constructs after removing items that did not meet the threshold criterion of 0.708.

Although the data were collected in 2023, the key relationships found between organizational culture, service capabilities, and competitive advantage are stable organizational realities and can be justified by robust statistical analysis. The confirmed large effect sizes and highly reliable measures demonstrate that the relationships are generally detached from short-term market fluctuations, and the current findings could be useful for healthcare management practice in the current period.

Table 1. Outer loadings of measurement items

Construct	Dimension	Indicator	Loading	t-value	p-value
Serving culture (SC)	Employees' serving culture	ESC1	0.842	28.176	< 0.001
		ESC2	0.856	30.541	< 0.001
		ESC3	0.887	42.673	< 0.001
		ESC4	0.832	26.189	< 0.001
	Leader serving culture	LSC1	0.871	36.428	< 0.001
		LSC2	0.848	29.357	< 0.001
		LSC3	0.825	24.631	< 0.001
		LSC4	0.853	31.246	< 0.001
Strategic human resource management (SHRM)	Employee selection	ES1	0.836	26.471	< 0.001
		ES2	0.859	32.469	< 0.001
	Employee placement	EP1	0.842	28.177	< 0.001
		EP2	0.821	23.762	< 0.001
	Career progression	CP1	0.867	35.189	< 0.001
		CP2	0.851	30.258	< 0.001
	Education and training	ET1	0.829	25.763	< 0.001
		ET2	0.846	29.214	< 0.001
	Performance evaluation	PE1	0.855	31.672	< 0.001
		PE2	0.873	37.561	< 0.001
	Rewards	RW1	0.847	29.416	< 0.001
		RW2	0.831	26.047	< 0.001
Workplace spirituality (WS)	Meaningful work	MW1	0.863	34.652	< 0.001
		MW2	0.875	39.154	< 0.001
		MW3	0.843	28.437	< 0.001
	Sense of community	SC1	0.839	27.348	< 0.001
		SC2	0.851	30.427	< 0.001
		SC3	0.827	24.963	< 0.001
	Alignment with organizational values	AOV1	0.869	36.178	< 0.001
		AOV2	0.854	31.267	< 0.001
		AOV3	0.832	26.159	< 0.001

Table 1 (cont.). Outer loadings of measurement items

Construct	Dimension	Indicator	Loading	t-value	p-value
Service-driven capability (SDC)	Relational interaction	RI1	0.847	29.412	< 0.001
		RI2	0.872	37.431	< 0.001
		RI3	0.856	31.768	< 0.001
	Ethical interaction	EI1	0.841	27.863	< 0.001
		EI2	0.862	33.765	< 0.001
		EI3	0.831	26.047	< 0.001
	Individual interaction	II1	0.853	31.134	< 0.001
		II2	0.871	36.324	< 0.001
		II3	0.842	28.173	< 0.001
	Empowered interaction	EMI1	0.864	34.875	< 0.001
		EMI2	0.849	29.867	< 0.001
		EMI3	0.838	27.234	< 0.001
	Concerted interaction	CI1	0.829	25.768	< 0.001
		CI2	0.847	29.418	< 0.001
		CI3	0.815	22.637	< 0.001
	Developmental interaction	DI1	0.857	32.146	< 0.001
		DI2	0.869	36.172	< 0.001
		DI3	0.839	27.384	< 0.001
Sustainable competitive advantage (SCA)	Economic	EC1	0.834	26.483	<0.001
		EC2	0.859	32.471	< 0.001
		EC3	0.821	23.764	< 0.001
	Quality	QU1	0.847	29.421	< 0.001
		QU2	0.862	33.768	< 0.001
		QU3	0.831	26.052	< 0.001
	Social	SO1	0.843	28.435	< 0.001
		SO2	0.857	32.143	< 0.001
		SO3	0.836	26.489	< 0.001

The measurement model showed strong reliability for the indicators, with outer loadings comfortably above the recommended value of 0.708 (range: 0.815–0.887) producing significant ($p < 0.001$) values ranging from 22.637 to 42.673. Reliable measures were produced across serving culture (0.825 to 0.887), strategic human resource management (0.821 to 0.873), workplace spirituality (0.827 to 0.875), service-driven capability (0.815 to 0.872), and sustainable competitive advantage (0.821 to 0.862). Cronbach's alpha and composite reliability (both measures of internal consistency reliability) were greater than 0.70 for all constructs.

The statistical analysis confirmed that measurement model reliability was strong, indicating that the indicators represented sufficient common variance for their respective constructs and provided a reliable basis to analyze the structural model and assess the hypotheses.

Table 2 showcases remarkably high internal consistency across all constructs, with Cronbach's alpha (0.918–0.943) and composite reliability (0.932–0.952) exceeding the 0.70 threshold. Service-driven capability has the highest reliability (α = 0.943, CR = 0.952), followed by SHRM,

Table 2. Construct reliability assessment

Construct	Cronbach's Alpha	Composite Reliability	Threshold	Status
Serving culture	0.928	0.942	> 0.70	Acceptable
Strategic human resource management	0.935	0.946	> 0.70	Acceptable
Workplace spirituality	0.921	0.937	> 0.70	Acceptable
Service-driven capability	0.943	0.952	> 0.70	Acceptable
Sustainable competitive advantage	0.918	0.932	> 0.70	Acceptable

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Table 3. Convergent validity assessment: Average variance extracted (AVE)

Construct	Average Variance Extracted (AVE)	Threshold	Status
Serving culture	0.876	> 0.50	Acceptable
Strategic human resource management	0.743	> 0.50	Acceptable
Workplace spirituality	0.762	> 0.50	Acceptable
Service-driven capability	0.715	> 0.50	Acceptable
Sustainable competitive advantage	0.689	> 0.50	Acceptable

serving culture, workplace spirituality, and sustainable competitive advantage, providing a solid measurement platform for exploring the relationships between constructs.

Convergent validity was assessed using the average variance extracted (AVE) for each construct. As presented in Table 3, all constructs demonstrated AVE values above the threshold of 0.50, confirming that the constructs explain more than 50% of the variance in their respective indicators.

Discriminant validity was assessed using the Fornell-Larcker criterion. As shown in Table 3, the square root of the AVE for each construct exceeds the correlation between that construct and any other construct, confirming discriminant validity.

The Fornell-Larcker criterion confirms strong discriminant validity, as the AVE square roots (0.830–0.936) continue to exceed the inter-construct correlations. It may be noted that the highest discriminant validity was observed for serving culture (0.936), followed by workplace spirituality (0.873), SHRM (0.862), service-driven capability (0.846), and sustainable competitive advantage (0.830). The inter-construct correlations ranged between 0.572 and 0.731, thus showing that each construct captured a distinct phenomenon, and in addition, confirms strong discriminant validity.

Additionally, the heterotrait-monotrait (HTMT) ratio was examined as a more stringent criterion for discriminant validity. All HTMT values were below the conservative threshold of 0.85, further confirming discriminant validity between constructs as shown in Table 5.

The HTMT ratio analysis in Table 5 confirms strong discriminant validity among all constructs, with values ranging from 0.621 to 0.782, well below the 0.85 threshold. The highest ratio exists between service-driven capability and sustainable competitive advantage (0.782), followed by service-driven capability and strategic human resource management (0.773), while serving culture and sustainable competitive advantage show the lowest correlation (0.621). These findings, along with the Fornell-Larcker criterion results, conclusively demonstrate that each construct represents a distinct concept, validating the measurement model and supporting further structural assessments.

Table 4. Discriminant validity assessment: Fornell-Larcker criterion

Construct	SC	SHRM	WS	SDC	SCA
Serving culture (SC)	0.936	–	–	–	–
Strategic human resource management (SHRM)	0.634	0.862	–	–	–
Workplace spirituality (WS)	0.587	0.619	0.873	–	–
Service-driven capability (SDC)	0.692	0.723	0.659	0.846	–
Sustainable competitive advantage (SCA)	0.572	0.678	0.631	0.731	0.830

Table 5. Discriminant validity assessment: HTMT ratio

Construct	SC	SHRM	WS	SDC	SCA
Serving culture (SC)	–	–	–	–	–
Strategic human resource management (SHRM)	0.678	–	–	–	–
Workplace spirituality (WS)	0.634	0.665	–	–	–
Service-driven capability (SDC)	0.735	0.773	0.709	–	–
Sustainable competitive advantage (SCA)	0.621	0.732	0.683	0.782	–

Table 6. Model fit indices

Index	Value	Threshold	Status
SRMR	0.062	< 0.08	Good fit
NFI	0.912	> 0.90	Good fit

Table 7. Collinearity assessment: Inner VIF values

Relationship	VIF	Threshold	Status
SC → SDC	1.873	< 5.0	No collinearity
SC → SCA	2.169	< 5.0	No collinearity
SHRM → SDC	2.071	< 5.0	No collinearity
SHRM → SCA	2.386	< 5.0	No collinearity
WS → SDC	1.942	< 5.0	No collinearity
WS → SCA	2.235	< 5.0	No collinearity
SDC → SCA	2.647	< 5.0	No collinearity

Note: SC = Serving culture; SHRM = Strategic human resource management; WS = Workplace spirituality; SDC = Service-driven capability; SCA = Sustainable competitive advantage.

While model fit indices are not central to PLS-SEM evaluation, standardized root mean square residual (SRMR) and normed fit index (NFI) were calculated to provide additional insight into model fit. The model demonstrated an SRMR value of 0.062, below the recommended threshold of 0.08, and an NFI of 0.912, above the recommended threshold of 0.90, indicating good model fit.

The model fit assessment strongly validates the structural model's quality. With an SRMR of 0.062 (below the 0.08 threshold) and an NFI of 0.912 (above the 0.90 threshold), the results confirm good alignment between the model and empirical data, establishing a reliable foundation for interpreting path coefficients and hypothesis testing.

Prior to examining structural relationships, the variance inflation factor (VIF) was calculated to assess potential collinearity among predictor constructs. As shown in Table 7, all VIF values were below the threshold of 5, indicating no problematic collinearity.

The results of the collinearity examination find no overrides of multicollinearity problems as all VIF values (1.873–2.647) were well below the 5.0 level, which would induce biases in path coefficients estimation and could reject the proposed structural relationships.

The hypothesis testing results demonstrate strong support for all proposed relationships. The largest effect was service-driven capability to sustainable competitive advantage ($\beta = 0.531$, $t = 3.667$, $p < 0.001$) with a medium to large effect size ($f^2 = 0.236$). In comparison, strategic human resource management impacts sustainable competitive advantage ($\beta = 0.247$, $t = 2.213$, $p = 0.014$) and service-driven capability ($\beta = 0.311$, $t = 3.455$, $p < 0.001$) with a small to medium effect size. Workplace spirituality shows evidence of modest but statistically significant relationships to sustainable competitive advantage ($\beta = 0.162$, $t = 1.982$, $p = 0.024$) and service-driven capability ($\beta = 0.142$, $t = 2.104$, $p = 0.018$) with small effect sizes. The mediation hypotheses were acknowledged, as service-driven capability showed a significant mediation effect for strategic human resource management / sustainable competitive advantage ($\beta = 0.165$, $t = 2.687$, $p = 0.003$) and workplace spirituality / sustainable competitive advantage ($\beta = 0.075$, $t = 1.965$, $p = 0.025$), indicating service-driven capabilities have an important role in facilitating an organization's aim to draw on its practices in order to generate competitive advantage.

The outputs of the coefficient of determination demonstrate substantial explanatory power: service-driven capability has excellent predictive power ($R^2 = 85.8\%$, adjusted $R^2 = 84.9\%$), which represents a large effect size. Sustainable competitive advantage has a moderate but impressive level of variance ($R^2 = 53.5\%$, adjusted $R^2 = 52.1\%$). These values demonstrate that the organizational constructs chosen provide a broad understanding of the variation in the endogenous constructs.

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Table 8. Hypothesis testing results

Hypothesis	Path	Path Coefficient	t-value	p-value	f^2	Conclusion
H1	SHRM → SCA	0.247	2.213	0.014	0.068	Supported
H2	WS → SCA	0.162	1.982	0.024	0.034	Supported
H3	SDC → SCA	0.531	3.667	0.000	0.236	Supported
H4	SHRM → SDC	0.311	3.455	0.000	0.114	Supported
H5	WS → SDC	0.142	2.104	0.018	0.027	Supported
H6	SHRM → SDC → SCA	0.165	2.687	0.003	–	Supported
H7	WS → SDC → SCA	0.075	1.965	0.025	–	Supported

Note: SC = Serving culture; SHRM = Strategic human resource management; WS = Workplace spirituality; SDC = Service-driven capability; SCA = Sustainable competitive advantage.

Table 9. Coefficient of determination (R^2)

Endogenous Construct	R^2	R^2 Adjusted	Effect Size
Service-Driven Capability (SDC)	0.858	0.849	Substantial
Sustainable Competitive Advantage (SCA)	0.535	0.521	Moderate

Table 10. Predictive relevance (Q^2)

Endogenous Construct	Q^2	Threshold	Status
Service-Driven Capability (SDC)	0.382	> 0	Predictive relevance
Sustainable Competitive Advantage (SCA)	0.246	> 0	Predictive relevance

The predictive relevance assessment presented in Table 10 confirms significant explanatory power for the endogenous constructs. Both service-driven capability and sustainable competitive advantage demonstrate Q^2 values well above the threshold of zero, with service-driven capability exhibiting a substantial predictive relevance of 0.382 and sustainable competitive advantage showing a moderate predictive relevance of 0.246. These positive Q^2 values indicate that the model accurately predicts the data points of indicators in reflective measurement models of endogenous constructs, thereby validating the model›s predictive capability and strengthening confidence in its practical applicability.

The significance of the indirect effects was assessed through bootstrapping with 5,000 resamples. Table 11 presents the direct, indirect, and total effects, along with their significance levels.

The results indicate that service-driven capability fully mediates the relationship between serving culture and sustainable competitive advantage, while it partially mediates the relationships between strategic human resource management and sustainable competitive advantage, and between workplace spirituality and sustainable competitive advantage.

Service-driven capabilities function as significant mediators, transforming organizational characteristics into sustainable competitive advantages for healthcare organizations. Analysis of 158 accredited hospitals in Central Java, Indonesia, conducted between March and June 2023, demonstrates these mediation effects. Although serving culture has no direct effect on competitive advantage ($\beta = -0.045$; $p > 0.05$), it has a significant impact on enhancing service capabilities ($\beta = 0.298$;

Table 11. Mediation analysis: Direct, indirect, and total effects

Relationship	Direct Effect	t-value	p-value	Indirect Effect	t-value	p-value	Total Effect	t-value	p-value	Type of Mediation
SC → SCA	–0.045	0.332	0.370	0.283	2.979	0.001	0.238	2.349	0.009	Full Mediation
SHRM → SCA	0.247	2.213	0.014	0.165	2.687	0.003	0.412	3.812	0.000	Partial Mediation
WS → SCA	0.162	1.982	0.024	0.075	1.965	0.025	0.237	2.526	0.006	Partial Mediation

Note: SC = Serving culture; SHRM = Strategic human resource management; WS = Workplace spirituality; SDC = Service-driven capability; SCA = Sustainable competitive advantage.

$p < 0.01$), and then the service capabilities lead to competitive outcomes (β = 0.531; $p < 0.01$). The significant mediation effect (β = 0.283; $p < 0.01$) suggests that cultural values not only need to be operationalized by formal service capabilities before they have business value.

These findings support resource orchestration theory by demonstrating that organizational resources require combination, adaptation, configuration, and strategic leverage to create value. In healthcare contexts, serving culture is a valuable intangible resource, but to create competitive outcomes, it has to be activated by utilizing formalized service capabilities. Healthcare organizations with stronger service-based cultures are able to develop better service-oriented capabilities in all six dimensions of service delivery. This is consistent with Bogale and Debela (2024), who found that organizational culture's multifaceted nature significantly influences organizational effectiveness and performance outcomes across various dimensions. Furthermore, the findings align with Azeem et al. (2021), who demonstrated that organizational culture must be operationalized through specific organizational mechanisms to expand competitive advantage through knowledge sharing and organizational innovation.

The model has good explanatory power, with significant variance explained for service capabilities ($R^2 = 0.858$) and competitive advantage ($R^2 = 0.535$). Strategic human resource management, which has the largest direct effect on capability development (β = 0.311, $p < 0.01$), demonstrates the important role of HR systems in selecting, developing, and rewarding service-oriented behaviors. Workplace spirituality shows a modest but significant effect on service capability (β = 0.142, $p < 0.05$), which does provide meaning and purpose that promote improved service actions, particularly appropriate in the caregiving context of healthcare. These results are supported by Boon et al. (2019), whose meta-analytical analysis demonstrated that effective SHRM practices in healthcare organizations enhance employee commitment, engagement, and organizational performance through systematic human capital development and capability enhancement. Additionally, the role of workplace spirituality is consistent with Hassan et al. (2016), who found that workplace spirituality significantly impacts job satisfaction through trust-building mechanisms, which in turn enhances service delivery capabilities.

The strong relationship between service capabilities and sustainable competitive advantage (β = 0.531, $p < 0.01$, $f^2 = 0.236$) reinforces the strategic importance of service excellence within hospital markets. For Indonesian hospitals operating in a National Health Insurance (JKN) environment, this finding is particularly important, where there are universal reimbursement rates and standard treatment protocols that restrict opportunities to differentiate on price and clinical services. Hence, service excellence is the leading competitive difference.

The six service capabilities – the relational, ethical, individual, empowered, concerted, and developmental interaction capabilities – provide healthcare administrators with a holistic way to systematically improve their service delivery. These capabilities are consistent with resource-based theory as valuable, rare, inimitable, and substituted resources that will provide sustainable competitive advantages that will be challenging for competitors to duplicate.

Complete mediation between service culture and competitive advantage – and partial mediation between workplace spirituality and SHRM – provides meaningful managerial implications. This suggests that cultural values alone, without a corresponding system of operations, rarely have competitive value. Hospitals must develop their service capabilities explicitly to leverage the full value of their cultural orientation to a competitive advantage.

There are some limitations to consider. The cross-sectional design does not permit causal inferences and necessitates longitudinal data to draw stronger conclusions about directionality. The geographic restriction to Central Java presents limits to the generalizability across other areas or healthcare systems. Self-reported administrator data have the potential to become common method bias despite precautions in their use. The explained variance of competitive advantage ($R^2 = 0.535$) captures greater influences on competitive advantage that could be suggested in future research, including external contingencies and multiple sources of data, including not only objective performance measures, but also patient evaluations.

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CONCLUSION

The results demonstrate that service-driven capabilities serve as important mediators that transform organizational culture and practices into sustainable competitive advantage within healthcare organizational contexts. Data collected during a period of relative sector stability in 2023 confirmed these mediation relationships, indicating organizational dynamics that remain highly relevant for contemporary healthcare management practice. The findings provide evidence that intangible organizational resources must be systematically operationalized through formal service delivery processes to create explicit business value.

The main contribution identifies the precise channels by which intangible might influence business value in hospitals, mainly through serving culture. Examination of 158 accredited hospitals in Central Java shows that cultural attributes are only realized through service capabilities that influence competitive results, with no standalone pathway to competitiveness. The mediation path has a coefficient of 0.283 ($p < 0.01$), which suggests that organizations need to develop and operationalize their cultural investments through service delivery mechanisms to produce measurable business value. The operationalization of cultural orientations into patient experience and operational excellence constitutes greater significance than underlying organizational values alone.

The critical factor is capability development as the nexus between intangible cultural assets and market performance. Healthcare organization administrators seeking to leverage their organizational culture for competitive advantage cannot focus disproportionately on cultural planning or initiatives alone. Management responsibility must be directed toward transforming cultural values into distinct service delivery systems that allow patients to experience meaningful differences and create barriers for competitor replication.

Strategic human resource management and workplace spirituality had direct and indirect effects on competitive advantage, suggesting different channels through which these variables create business value. The substantial explained variance in service-driven capabilities ($R^2 = 0.858$) and sustainable competitive advantage ($R^2 = 0.535$) confirms the theoretical model›s strong explanatory power. For healthcare administrators, this study provides concrete strategies for establishing competitive strength in increasingly competitive healthcare markets. Rather than keeping organizational culture separate from business processes, administrators need to deliberately form service capabilities as levers to transform cultural values into better patient experiences and operational effectiveness. The six capabilities (relational, ethical, individual, empowered, concerted, and developmental) offer an overall platform for service enhancement programs.

This study provides robust empirical evidence through a comprehensive methodology and rigorous analysis; however, several future research opportunities exist. While the cross-sectional design appropriately establishes associations between constructs, longitudinal studies examining capability development over time would enhance understanding of these relationships. Using multiple sources of data, including a patient viewpoint, as well as objective performance measures, would further develop the validity of the service capability / competitive advantage relationship.

Future research needs to advance on this basis with the use of longitudinal analyses of service capability development over time, qualitative analyses of specific practices representative of each capability dimension, cross-cultural comparison research, and tests of potential moderating variables such as hospital size, competitive pressure, or patient characteristics. Return on investment analysis research in service capabilities would further establish the business case for investing in service initiatives.

By illuminating the critical relationships between organizational constructs, service competencies, and competitive advantage, this study establishes a foundation for future research examining how healthcare organizations can leverage intangible assets to achieve business success in competitive markets.

AUTHOR CONTRIBUTIONS

Conceptualization: Kristiana Susilowati.
Data curation: Kristiana Susilowati.
Formal analysis: Lieli Suharti, Agus Sugiarto.
Investigation: Kristiana Susilowati, Lieli Suharti, Agus Sugiarto.
Methodology: Kristiana Susilowati, Lieli Suharti, Agus Sugiarto.
Resources: Kristiana Susilowati.
Supervision: Lieli Suharti, Agus Sugiarto.
Validation: Kristiana Susilowati, Lieli Suharti, Agus Sugiarto.
Visualization: Kristiana Susilowati.
Writing – original draft: Kristiana Susilowati.
Writing – review & editing: Kristiana Susilowati, Lieli Suharti, Agus Sugiarto.

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