

***Beyond Profit Logic: Does Organizational Mission Shape Strategic Management Accounting Effectiveness? Evidence from Islamic Educational Institutions in Indonesia***

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**ABSTRACT**

*Despite growing interest in Strategic Management Accounting Techniques (SMAT), their application in non-profit, values-based educational institutions remains underexplored. Muhammadiyah educational institutions (Amal Usaha Muhammadiyah/AUM) provide a unique context because they operate under Islamic organizational values while pursuing educational and social missions in an increasingly competitive educational environment. This study examines the effects of competitor accounting and strategic costing on the competitive advantage of Muhammadiyah educational institutions from the Resource-Based View (RBV) perspective. Data were collected from 107 Muhammadiyah school principals in Riau Province, representing an 84.25% response rate from a saturated sample of 127 schools. The proposed model was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with a second-order Hierarchical Component Model (HCM). The results show that competitor accounting has a positive and significant effect on competitive advantage ( $\beta = 0.531, p < 0.001$ ), whereas strategic costing has no significant effect ( $\beta = 0.130, p = 0.261$ ). The model explains 32.7% of the variance in competitive advantage ( $R^2 = 0.327$ ). These findings suggest that competitor-oriented accounting information is a more valuable strategic resource than cost-oriented techniques in values-based educational institutions. The study extends the Strategic Management Accounting and RBV literature by highlighting the importance of aligning management accounting practices with organizational mission and institutional values. Practically, Muhammadiyah school leaders should strengthen competitor intelligence and benchmarking to achieve sustainable competitive advantage.*

**Keywords:** Strategic Management Accounting Techniques, Competitor Accounting, Strategic Costing, Competitive Advantage, Resource-Based View

## **1. Introduction**

The education sector has become an increasingly dynamic and competitive environment in which institutions must continuously adapt to remain sustainable (Pucciarelli & Kaplan, 2016). Consequently, adopting appropriate strategies is essential for schools to achieve and sustain competitive advantage (Rosmayani & Mardatillah, 2021; Sumkaew & Intanon, 2021). Competitive advantage depends on performing activities differently from competitors to create unique value that is difficult to imitate (Porter, 1985b). As one of the world's largest Islamic organizations, Muhammadiyah has contributed to Indonesian education for more than a century through 3,334 schools nationwide, including 127 in Riau Province. While this extensive network reflects its significant educational contribution, it also creates managerial challenges in maintaining quality, sustainability, and competitiveness across geographically dispersed schools. However, many schools in Indonesia continue to operate at standard performance levels,

indicating persistent challenges in achieving sustainable competitive advantage (Ilmi et al., 2026). For Muhammadiyah educational institutions, these challenges are intensified by the need to manage limited resources strategically while remaining aligned with Islamic values and organizational mission.

The strategic environment facing Muhammadiyah educational charitable enterprises (Amal Usaha Muhammadiyah/AUM) has become increasingly complex. The implementation of the Merdeka Belajar Kampus Merdeka (MBKM) curriculum has increased resource demands and operational complexity (Marlina et al., 2023), while policy changes and evolving stakeholder expectations require more proactive strategic management. Competitive advantage therefore depends on selecting appropriate strategies (Triyana & Setiawardani, 2019). For AUM, these pressures are compounded by the dual responsibility of achieving educational excellence while preserving Islamic organizational values, distinguishing them from both commercial organizations and public educational institutions.

Strategic Management Accounting Techniques (SMAT) are modern accounting practices designed to support strategic decision-making (Suriyanti et al., 2021). SMAT consists of sixteen techniques grouped into five dimensions: strategic costing, competitor accounting, customer accounting, strategic decision making, and performance control (Sumkaew & Intanon, 2020). Among these, strategic costing and competitor accounting are widely recognized for strengthening competitive positioning. Strategic costing supports organizations in evaluating cost structures and improving cost efficiency to enhance competitive advantage (Junaedi et al., 2018; Oboh & Ajibolade, 2017; Turner & Endres, 2017), whereas competitor accounting analyzes competitors' positions, performance, and cost structures to identify strategic opportunities and improve competitive performance (Oyewo, 2021; Rashid et al., 2020).

Recent studies increasingly view SMAT as a strategic capability rather than merely a set of accounting tools. Its effectiveness depends on alignment with organizational strategy, governance, and institutional objectives, particularly in knowledge-intensive and service-oriented organizations such as educational institutions (Cescon et al., 2019; Su et al., 2023). Likewise, competitive advantage in educational organizations increasingly derives from effective use of strategic information, organizational learning, and intangible resources rather than financial assets alone (Alamri, 2018). These developments highlight the importance of investigating SMAT within educational institutions whose missions differ substantially from commercial enterprises.

Research on the relationship between SMAT and competitive advantage has expanded considerably (Irwanty et al., 2022; Laela et al., 2018; Marlina et al., 2019). Competitor accounting has been shown to strengthen competitive advantage by helping organizations identify market opportunities and strategic differentiation (Astuti et al., 2020; Egbuhuzor et al., 2021), while strategic costing has also been associated with improved competitive performance (Adigbole et al., 2022). Nevertheless, findings remain inconsistent. Some studies report no significant relationship between competitor accounting and competitive advantage (Thapayom, 2019; Valdiansyah & Augustine, 2021), whereas others find that certain strategic costing techniques, such as target costing, do not significantly influence competitive advantage (Adigbole et al., 2022). These inconsistencies suggest that contextual factors may shape the effectiveness of SMAT. Moreover, previous studies have focused mainly on large corporations (Agu et al., 2016; Al-Mawali & Lam, 2016; Fowzia & Afroz, 2016), universities (Marlina et al., 2023), and MSMEs (Ardiansyah et al., 2021; Suriyanti & Aristi, 2020), where financial performance is the dominant objective. Empirical evidence from faith-based non-profit educational institutions remains scarce, and few studies have examined whether organizational mission influences the strategic value of specific SMAT dimensions.

The Resource-Based View (RBV) provides an appropriate theoretical lens for explaining how SMAT contributes to competitive advantage. RBV argues that organizations achieve sustainable competitive advantage through valuable, rare, and difficult-to-imitate resources and

capabilities (Soewarno & Tjahjadi, 2020; Wernerfelt, 1995). More recent RBV developments emphasize dynamic capabilities, knowledge integration, and strategic information processing as key sources of competitive advantage, particularly in service and educational organizations where intangible assets dominate value creation (J. B. Barney et al., 2021; Kozlenkova et al., 2014). Within this perspective, competitor accounting and strategic costing function as strategic informational resources that help organizations understand their competitive environment and allocate resources effectively. However, their strategic value may vary across organizational contexts. In AUM schools, where decisions are guided by Islamic values and community service rather than profit maximization, different SMAT dimensions may contribute differently to competitive advantage.

AUM therefore provides a unique setting for examining strategic management practices. As faith-based, non-profit institutions operating in a competitive educational market, AUM schools combine mission-driven objectives with resource constraints, creating conditions distinct from corporate and conventional educational organizations. Despite their scale and social importance, empirical research on SMAT within AUM remains limited. Accordingly, this study investigates the effects of competitor accounting and strategic costing on the competitive advantage of Muhammadiyah educational institutions in Riau Province using the RBV framework. Data were collected from 107 Muhammadiyah school principals through saturated sampling and analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with second-order confirmatory factor analysis. The findings show that competitor accounting positively and significantly influences competitive advantage, emphasizing competitor-oriented accounting information as a strategic resource in AUM schools. Unlike previous studies that assume SMAT has uniform effectiveness across organizations, this study demonstrates that organizational mission constitutes an important contextual boundary condition influencing the strategic value of management accounting techniques. Consequently, the study extends Strategic Management Accounting literature by offering a mission-based explanation for the differing effectiveness of competitor accounting and strategic costing, while also extending RBV by showing that the strategic value of SMAT depends on organizational mission and values and providing practical guidance for AUM leaders seeking sustainable competitive advantage (Ahmad, 2017; Lucas et al., 2013).

## **2. Literature Review**

Sustained organizational performance depends not only on the possession of resources but also on the ability to acquire, interpret, and utilize strategic information effectively. Organizations outperform competitors because they generate and apply strategic information more effectively than rivals (Guilding, 1999). Accounting information that extends beyond internal financial reporting to include external competitive intelligence becomes a valuable resource for strategic decision-making (Bromwich, 1990). This capability is particularly important in resource-constrained and highly competitive environments, where strategic information determines an organization's ability to sustain competitive advantage (Obloh & Ajibolade, 2017). For Muhammadiyah educational institutions (AUM), which operate under limited resources and increasing competition following educational reforms, the strategic use of accounting information remains an underexplored organizational capability.

Strategic Management Accounting Techniques (SMAT) provide accounting information to support strategic decisions by integrating financial and non-financial perspectives (Sumkaew & Intanon, 2020; Suriyanti et al., 2021). Among the sixteen SMAT techniques grouped into five dimensions, competitor accounting and strategic costing have received considerable attention because of their potential to strengthen organizational competitiveness (Cadez & Guilding, 2008; Ditkaew, 2023; Rashid et al., 2020). Competitor accounting enables organizations to monitor competitors' positions, performance, and cost structures to formulate strategic

responses (Oyewo, 2021; Rashid et al., 2020), whereas strategic costing supports strategic resource allocation through cost-based decision making (Junaedi et al., 2018; Oboh & Ajibolade, 2017). This study focuses on these two SMAT dimensions within Muhammadiyah educational institutions in Riau Province.

Previous studies generally report positive relationships between SMAT dimensions and competitive advantage (Holm et al., 2016; Irwanty et al., 2022; Laela et al., 2018; Lisa, 2015; Marlina et al., 2019). Competitor accounting enhances competitive positioning by facilitating competitor analysis and strategic differentiation (Astuti et al., 2020; Egbuhuzor et al., 2021), while strategic costing contributes through improved cost alignment with organizational strategy (Adigbole et al., 2022; Marlina & Tjahjadi, 2020). Nevertheless, empirical findings remain inconsistent. Thapayom (2019) and Valdiansyah & Augustine (2021) found no significant effect of competitor accounting, whereas Adigbole et al. (2022) reported insignificant effects for target costing. Earlier, Guilding (1999) also found strategic costing to be among the least utilized and least useful SMAT practices. Moreover, prior research has predominantly focused on corporations (Agu et al., 2016; Al-Mawali & Lam, 2016; Fowzia & Afroz, 2016), universities (Marlina et al., 2023), and MSMEs (Ardiansyah et al., 2021; Suriyanti & Aristi, 2020), where organizational objectives emphasize financial performance. These inconsistencies suggest that SMAT effectiveness may depend on organizational context, mission, and institutional values (Ditkaew, 2023).

Recent studies further emphasize that the effectiveness of SMAT depends on its alignment with organizational strategy, governance, and institutional objectives rather than being universally applicable (Cescon et al., 2019; Su et al., 2023). Systematic reviews also show that SMAT research has expanded beyond manufacturing firms to service organizations, higher education, and public institutions, where organizational success extends beyond financial outcomes (Alamri, 2018). This perspective is particularly relevant for Islamic educational institutions, whose objectives integrate educational quality, religious values, and community service. Consequently, competitor accounting and strategic costing may function differently from their roles in profit-oriented organizations. Despite this theoretical relevance, empirical evidence remains scarce for faith-based educational institutions, particularly in developing countries.

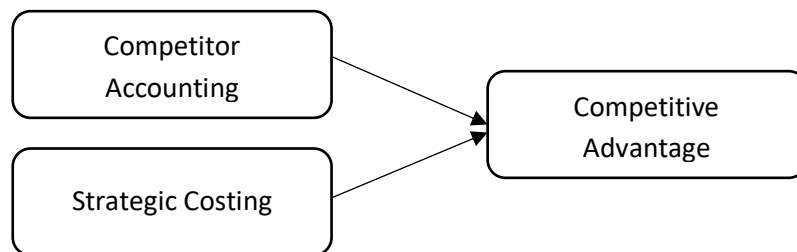
The Resource-Based View (RBV) provides an appropriate theoretical foundation for explaining these inconsistencies. According to Barney (1991), sustainable competitive advantage depends on resources that are valuable, rare, inimitable, and non-substitutable (VRIN). Importantly, the value of a resource depends on its contribution to organizational effectiveness within a specific context rather than universally across organizations (Lubis, 2022; Soewarno & Tjahjadi, 2020; Wernerfelt, 1995). In AUM schools, organizational decisions are guided by Islamic values and community service rather than profit maximization. Therefore, competitor accounting, which provides externally oriented strategic information, is expected to retain high strategic value, whereas the effectiveness of strategic costing may differ because resource allocation is driven more by institutional mission than cost efficiency (Ahmad, 2017; Lucas et al., 2013).

From the RBV perspective, competitor accounting represents a valuable strategic information resource because it strengthens organizational responsiveness through competitor position monitoring, performance appraisal, and cost assessment (J. Barney, 1991; Guilding, 1999; Cadez & Guilding, 2008; Rashid et al., 2020). Recent evidence also shows that competitor-oriented accounting enhances organizational adaptability and sustainable competitive advantage (Cescon et al., 2019; Su et al., 2023). Previous studies consistently support its positive influence on competitive advantage (Astuti et al., 2020; Egbuhuzor et al., 2021). Therefore, the following hypothesis is proposed:

**H1:** *Competitor accounting has a positive and significant effect on competitive advantage.*

Strategic costing enables organizations to align cost structures with strategic objectives and improve long-term competitive positioning (Junaedi et al., 2018; Oboh & Ajibolade, 2017; Turner & Endres, 2017). It comprises attribute costing, life cycle costing, quality costing, target costing, and value chain costing (Cadez & Guilding, 2008). While strategic costing has demonstrated positive effects in profit-oriented organizations (Adigbole et al., 2022; Marlina & Tjahjadi, 2020), its strategic value within RBV depends on whether cost efficiency aligns with organizational priorities (J. Barney, 1991). Because AUM institutions emphasize Islamic values and community service, the contribution of strategic costing to competitive advantage requires empirical verification. Recent studies also indicate that its effectiveness depends on alignment with institutional priorities (Alamri, 2018). Accordingly, this study proposes the following hypothesis:

**H2:** *Strategic costing has a positive and significant effect on competitive advantage.*



**Figure 1. Conceptual Framework**

### 3. Methods

#### Population and Sample

The population of this study comprised all Muhammadiyah educational institutions in Riau Province, including elementary schools (SD), junior high schools (SMP), and senior high schools (SMA) operating under the Muhammadiyah regional organization. According to the Majelis Dikdasmen Muhammadiyah of Riau Province, there were 127 Muhammadiyah schools distributed across twelve regencies and municipalities, namely Pekanbaru, Kampar, Dumai, Kuantan Singingi, Indragiri Hulu, Indragiri Hilir, Pelalawan, Rokan Hilir, Rokan Hulu, Siak, Bengkalis, and the Meranti Islands.

A saturated sampling technique (census approach) was employed, whereby all school principals were invited to participate because they possess the highest level of managerial responsibility and strategic decision-making authority within their respective schools. Of the 127 questionnaires distributed, 107 usable responses were returned, representing a response rate of 84.25%.

The final sample size satisfies the recommended requirements for Partial Least Squares Structural Equation Modeling (PLS-SEM). Following the ten-times rule proposed by Hair et al. (2021), the minimum required sample should be at least ten times the maximum number of structural paths directed at any endogenous construct. Since the competitive advantage construct receives two structural paths, the minimum sample requirement was substantially exceeded. Furthermore, the sample size is consistent with recommendations for achieving adequate statistical power in PLS-SEM analyses involving models with moderate complexity (Hair et al., 2021).

#### Questionnaire Development

The questionnaire was developed by adapting measurement items from well-established studies to ensure content validity and theoretical consistency. Competitor accounting and strategic costing were measured using the Strategic Management Accounting framework developed by Cadez & Guilding (2008), with competitor accounting also drawing upon Guilding

(1999). Competitive advantage was measured based on Porter (1985a) competitive strategy framework.

**Table 1. Indicators and Variable Measurement Scales**

No	Variables	Indicators	Measurement Scale
1.	Competitor Accounting (Cadez & Guilding, 2008; Guilding, 1999)	1. Competitor Position Monitoring (CPM) 2. Competitor Performance Appraisal (CPA) 3. Competitor Cost Assessment (CCA)	Likert
2.	Strategic Costing (Cadez & Guilding, 2008)	1. Attribute Costing (AC) 2. Life Cycle Costing (LCC) 3. Quality Costing (QC) 4. Target Costing (TC) 5. Value Chain Costing (VCC)	Likert
3.	Competitive Advantage (Porter, 1985a)	1. Differentiation (DF) 2. Cost Leadership (CL)	Likert

Because the original measurement instruments were developed primarily for business organizations, several items were carefully adapted to reflect the context of Muhammadiyah educational institutions. Terminology referring to firms, customers, products, and markets was replaced with terms more appropriate for educational organizations, including schools, students, parents, educational services, and competing educational institutions. These adaptations were intended to preserve the original conceptual meaning while improving contextual relevance.

Content validity was assessed through expert judgment involving three experts consisting of two experienced Muhammadiyah school principals and one academic specializing in management accounting. Their feedback focused on item clarity, contextual appropriateness, and linguistic accuracy. Minor revisions were subsequently incorporated before the questionnaire was administered.

**Data collection technique**

Data were collected through a structured questionnaire administered to the principals of Muhammadiyah schools in Riau Province, who served as the key informants because of their responsibility for strategic planning and institutional management. Prior to the main survey, the questionnaire underwent content validation through expert judgment involving two experienced Muhammadiyah school principals and one academic specializing in management accounting. Based on their feedback, several wording modifications were made to ensure that the measurement items were appropriate for the educational context while preserving their original conceptual meaning. The finalized questionnaire was then distributed directly to all eligible respondents.

**Data Analysis**

The proposed research model was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. PLS-SEM was selected because the study aims to examine predictive relationships among latent constructs while simultaneously evaluating a hierarchical component model (HCM). In addition, PLS-SEM is particularly appropriate for research involving relatively moderate sample sizes, complex structural relationships, and multidimensional latent constructs (Hair et al., 2021).

Prior to model evaluation, common method bias (CMB) was assessed using Harman's single-factor test (Podsakoff et al., 2003). An unrotated exploratory factor analysis was performed on all measurement items. The first factor explained 39.593% of the total variance, which is below the recommended threshold of 50%, indicating that common method bias was unlikely to pose a serious threat to the validity of the findings.

This study employed a second-order Hierarchical Component Model (HCM) because Competitor Accounting and Strategic Costing are multidimensional constructs represented by several first-order dimensions. The higher-order constructs were estimated using the repeated indicator approach, which is appropriate for reflective-reflective hierarchical component models and enables the multidimensional nature of the constructs to be represented while maintaining theoretical consistency (Hair et al., 2021).

The data analysis was conducted in three stages. First, the first-order measurement model was evaluated by examining indicator reliability (outer loadings), convergent validity using Average Variance Extracted (AVE), discriminant validity using the Fornell–Larcker criterion and the Heterotrait–Monotrait ratio (HTMT), and internal consistency reliability using Cronbach's alpha and Composite Reliability (CR). Second, the second-order measurement model was assessed using the same validity and reliability criteria to confirm the adequacy of the higher-order constructs. Third, the structural model was evaluated by examining collinearity diagnostics using the Variance Inflation Factor (VIF), the coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), predictive relevance ( $Q^2$ ), and the Standardized Root Mean Square Residual (SRMR). Finally, the significance of the hypothesized relationships was assessed using the bootstrapping procedure with 5,000 bootstrap subsamples, following the recommendations of Hair et al. (2021).

**Ethical Considerations**

Participation in this study was entirely voluntary. Before completing the questionnaire, respondents were informed about the purpose of the research, the confidentiality of their responses, and their right to withdraw from the study at any time without consequence. No personal identifying information was collected, and all responses were analyzed anonymously and reported only in aggregate form. Informed consent was obtained from all participants prior to data collection, and permission to conduct the study was obtained through the Muhammadiyah educational authorities in Riau Province.

**3. Results and Discussion**

**Descriptive Statistics and Respondent Profile**

Data were collected through a structured questionnaire distributed to all 127 Muhammadiyah school principals in Riau Province, of whom 107 participated, representing a response rate of 84%. The respondent demographic profile is presented in Table 2.

**Table 2. Respondent Demographic Profile**

Categories	Frequency	Percentage (%)
<b>Gender</b>		
Male	72	67%
Female	35	33%
Amount	107	100%
<b>Level of Education</b>		
Bachelor	68	64%
Masters	30	28%
Doctor	9	8%
Amount	107	100%
<b>Age</b>		
20-30 Years	23	22%
31-40 Years	44	41%
41-50 Years	29	27%
>50 Years	11	10%
Total	107	100%

*Note: Data collected via structured questionnaire survey, 2023.*

As shown in Table 2, the majority of respondents were male (67%), held a bachelor's degree as their highest educational qualification (64%), and fell within the 31 to 40 age range (41%). This profile is broadly representative of Muhammadiyah school principals in Riau Province, reflecting the demographic characteristics of educational leadership within AUM institutions in the region.

Table 3 presents the descriptive statistics for all research variables. Across all indicators, the standard deviation values are consistently lower than their respective mean values, suggesting low dispersion and relatively homogeneous responses among respondents. This pattern reflects a reasonable degree of consistency in the data, indicating that the variables are well-suited for further statistical analysis.

**Table 3. Descriptive Statistics**

Indicator	Min	Max	Mean	Std. Deviation
<b>Competitor Accounting</b>				
Competitor Position Monitoring (CPM) 1	2	5	3.804	0.829
Competitor Position Monitoring (CPM) 2	2	5	3.935	0.792
Competitor Position Monitoring (CPM) 3	2	5	3.804	0.818
Competitor Position Monitoring (CPM) 4	2	5	3.916	0.802
Competitor Performance Appraisal (CPA) 1	2	5	3.841	0.814
Competitor Performance Appraisal (CPA) 2	2	5	3.972	0.746
Competitor Cost Assessment (CCA)	2	5	3.897	0.700
<b>Strategic Costing</b>				
Attribute Costing (AC) 1	2	5	3.897	0.776
Attribute Costing (AC) 2	2	5	3.813	0.779
Life Cycle Costing (LCC)	2	5	3.822	0.711
Quality Costing (QS)	2	5	3.794	0.774
Target Costing (TC)	2	5	3.935	0.730
Value Chain Costing (VCC) 1	2	5	3.991	0.720
Value Chain Costing (VCC) 2	2	5	3.935	0.743
<b>Competitive Advantage</b>				
Differentiation (DF) 1	2	5	3.738	0.769
Differentiation (DF) 2	2	5	3.897	0.726
Differentiation (DF) 3	2	5	3.617	0.735
Differentiation (DF) 4	2	5	3.841	0.779
Cost Leadership (CL) 1	2	5	3.822	0.856
Cost Leadership (CL) 2	2	5	3.813	0.837
Cost Leadership (CL) 3	2	5	3.850	0.737
Cost Leadership (CL) 4	2	5	3.832	0.818

Note : \* Single-item construct; loading factor, AVE, and reliability values are fixed at 1.000 by design.

The mean scores for all indicators ranged from 3.617 to 3.991 on a five-point Likert scale, reflecting a moderately high level of perceived implementation across all constructs. Muhammadiyah school principals in Riau Province generally perceive both competitor accounting and strategic costing practices as reasonably applied within their institutions, and similarly regard their schools as possessing a moderate to good level of competitive advantage. The relatively high mean scores for Competitor Performance Appraisal (CPA2 = 3.972) and Value Chain Costing (VCC1 = 3.991) suggest that AUM school principals are increasingly attentive to external competitive information and value chain considerations in their strategic decision-making. These findings are consistent with the growing competitive pressures facing AUM

institutions following curriculum reforms, and underscore the relevance of examining SMAT practices within this context.

**Common Method Bias**

Table 4 presents the results of Harman's single-factor test, which was conducted to assess the potential presence of common method bias arising from the use of self-administered questionnaires completed by a single respondent in each institution. The analysis shows that the first unrotated factor has an eigenvalue of 8.710 and explains 39.593% of the total variance. This value is below the commonly accepted threshold of 50% recommended by Podsakoff et al. (2003), indicating that no single factor accounts for the majority of the covariance among the measurement items. Therefore, common method bias is unlikely to pose a serious threat to the validity of the research findings, and the observed relationships among the constructs are unlikely to be substantially influenced by systematic measurement bias.

**Table 4. Harman’s Single Factor**

Component	Eigenvalue	Variance Explained (%)	Cumulative (%)
First Factor	8.710	39.593	39.593

*Note: Harman's single-factor test indicates that common method bias is not a serious concern when the first unrotated factor explains less than 50% of the total variance (Podsakoff et al., 2003).*

**Measurement Model Assessment**

**First Order Measurement Model**

The evaluation of the measurement model began with the assessment of the first-order constructs to ensure that all lower-order dimensions were measured reliably and validly before estimating the higher-order hierarchical component model (HCM). Following the guidelines of Hair et al. (2021), the first-order measurement model was evaluated through convergent validity, discriminant validity, and internal consistency reliability. Convergent validity was assessed using indicator loadings and the Average Variance Extracted (AVE), whereas discriminant validity was evaluated using the Fornell–Larcker criterion and the Heterotrait–Monotrait ratio (HTMT). Internal consistency reliability was examined using Cronbach's alpha and Composite Reliability (CR). The results of the first-order measurement model assessment are presented in Table 5.

**Table 5. Convergent Validity Result: First-Order**

Construct	Indicator	Loading	Average Variance Extracted (AVE)
<b>Competitor Accounting</b>			
Competitor Position Monitoring	CPM1	0.889	0.737
	CPM2	0.826	
	CPM3	0.863	
	CPM4	0.854	
Competitor Performance Appraisal	CPA1	0.881	0.813
	CPA2	0.922	
Competitor Cost Assesment	CSA1	1.000	1.000
<b>Strategic Costing</b>			
Attribute costing	AC1	0.948	0.753
	AC2	0.779	
Life Cycle Costing	LCC1	1.000	1.000
Quality Costing	QC1	1.000	1.000
Target Costing	TC1	1.000	1.000
Value Chain Costing	VCC1	0.897	0.838
	VCC2	0.934	
<b>Competitive Advantage</b>			

Construct	Indicator	Loading	Average Variance Extracted (AVE)
Diferentiation	DF1	0.875	0.758
	DF2	0.845	
	DF3	0.878	
	DF4	0.886	
Cost Leadership	CL1	0.804	0.709
	CL2	0.825	
	CL3	0.868	
	CL4	0.869	

Note: \* Single-item construct. Loading factor and AVE values of 1.000 are a mathematical consequence of single-item specification and should be interpreted with caution. See discussion in Section 4.

Table 5 presents the results of the convergent validity assessment for the first-order measurement model. Convergent validity was evaluated using indicator loadings and the Average Variance Extracted (AVE). As shown in the table, all indicator loadings exceed the recommended threshold of 0.700 for reflective measurement models (Hair et al., 2021), indicating that each indicator adequately represents its respective latent construct. Likewise, all AVE values are above the minimum recommended threshold of 0.500, confirming that each construct explains more than half of the variance of its indicators and therefore demonstrates satisfactory convergent validity.

For the Competitor Accounting construct, Competitor Position Monitoring achieved an AVE of 0.737, while Competitor Performance Appraisal recorded an AVE of 0.813. Competitor Cost Assessment was operationalized as a single-item construct and consequently obtained loading and AVE values of 1.000. Within the Strategic Costing construct, Attribute Costing and Value Chain Costing achieved AVE values of 0.753 and 0.838, respectively. Similarly, Life Cycle Costing, Quality Costing, and Target Costing were specified as single-item constructs, resulting in loading and AVE values of 1.000. For the Competitive Advantage construct, Differentiation and Cost Leadership achieved AVE values of 0.758 and 0.709, respectively, both exceeding the recommended threshold.

The use of several single-item first-order constructs is acknowledged as a methodological limitation. Although single-item measures may be appropriate for narrowly defined and concrete constructs (Bergkvist & Rossiter, 2007), the resulting loading and AVE values of 1.000 are mathematical consequences of single-item specification rather than evidence of perfect measurement quality. Therefore, these values should be interpreted with caution, and this limitation is further discussed in the concluding section of the study.

**Table 6. Discriminant Validity: Fornell-Larcker Criterion**

	CPM	CPA	CCA	AC	LCC	QC	TC	VCC	DF	CL
CPM	<b>0.858</b>									
CPA	0.854	<b>0.902</b>								
CCA	0.748	0.634	<b>1.000</b>							
AC	0.219	0.119	0.294	<b>0.868</b>						
LCC	0.089	0.076	0.107	0.713	<b>1.000</b>					
QC	0.109	0.088	0.218	0.752	0.697	<b>1.000</b>				
TC	0.147	0.100	0.152	0.732	0.633	0.709	<b>1.000</b>			
VCC	0.161	0.108	0.240	0.842	0.763	0.714	0.732	<b>0.916</b>		
DF	0.540	0.500	0.518	0.296	0.075	0.278	0.174	0.179	<b>0.871</b>	
CL	0.511	0.467	0.251	0.251	0.083	0.205	0.127	0.215	0.903	<b>0.842</b>

Note: Diagonal values (bold) represent the square root of the Average Variance Extracted (AVE). Discriminant validity is established when the square root of AVE for each construct is greater than its correlations with all other constructs (Fornell & Larcker, 1981).

Table 6 presents the discriminant validity assessment for the first-order measurement model using the Fornell–Larcker criterion. According to this criterion, discriminant validity is established when the square root of the Average Variance Extracted (AVE), represented by the diagonal values, is greater than the correlations between each construct and all other constructs (Fornell & Larcker, 1981). As shown in Table 6, the majority of the first-order constructs satisfy this criterion, indicating that the constructs are empirically distinct and adequately represent their respective conceptual domains.

Relatively high correlations are observed between several dimensions belonging to the same higher-order constructs, particularly Competitor Position Monitoring and Competitor Performance Appraisal, Attribute Costing and Value Chain Costing, as well as Differentiation and Cost Leadership. Such relationships are theoretically expected because these dimensions collectively represent broader higher-order constructs within the hierarchical component model. Therefore, the discriminant validity of the higher-order constructs was further evaluated in the second-order measurement model.

**Table 7. Reliability Test Results**

Construct	Cronbach's Alpha (CA)	rho_A	Composite Reliability (CR)
Competitor Position Monitoring	0.881	0.884	0.918
Competitor Performance Appraisal	0.772	0.793	0.897
Competitor Cost Assessment	1.000	1.000	1.000
Attribute Costing	0.700	0.931	0.858
Life Cycle Costing	1.000	1.000	1.000
Quality Costing	1.000	1.000	1.000
Target Costing	1.000	1.000	1.000
Value Chain Costing	0.809	0.834	0.912
Differentiation	0.894	0.898	0.926
Cost Leadership	0.864	0.890	0.907

Note: Single-item constructs. Cronbach's Alpha, rho\_A, and Composite Reliability (CR) values of 1.000 are mathematical consequences of single-item measurement and should not be interpreted as evidence of perfect reliability. All multi-item constructs satisfy the recommended thresholds for internal consistency reliability (Cronbach's Alpha  $\geq$  0.70 and Composite Reliability  $\geq$  0.70) (Hair et al., 2021).

Table 7 presents the internal consistency reliability results for all first-order constructs. Reliability was assessed using Cronbach's Alpha, Composite Reliability (rho\_a), and Composite Reliability (rho\_c). As shown in Table 7, all multi-item constructs satisfy the recommended thresholds, with Cronbach's Alpha values exceeding 0.70 and Composite Reliability values exceeding 0.70 (Hair et al., 2021). These results indicate that the measurement items consistently represent their respective latent constructs and demonstrate satisfactory internal consistency reliability.

Several first-order constructs, namely Competitor Cost Assessment, Life Cycle Costing, Quality Costing, and Target Costing, were operationalized using single-item measures. Consequently, Cronbach's Alpha and Composite Reliability values of 1.000 are mathematical consequences of single-item measurement rather than indications of perfect reliability. Although single-item measures may be appropriate for narrowly defined constructs, these values should be interpreted with caution. Overall, the reliability assessment confirms that the first-order measurement model demonstrates adequate internal consistency and is suitable for subsequent evaluation of the higher-order measurement model.

**Second-Order Measurement Model**

Following the satisfactory evaluation of the first-order measurement model, the second-order measurement model was subsequently assessed to confirm the validity and reliability of the higher-order constructs. The assessment included convergent validity, discriminant validity, and internal consistency reliability of the higher-order constructs representing Competitor Accounting, Strategic Costing, and Competitive Advantage.

**Table 8. Convergent Validity: Second-Order**

Variable	Indicator	Loading	AVE
<b>Competitor Accounting</b>			
Competitor Position Monitoring	CPM	0.954	0.831
Competitor Performance Appraisal	CPA	0.907	
Competitor Cost Assessment	CCA	0.872	
<b>Strategic Costing</b>			
Attribute Costing	AC	0.932	0.780
Life Cycle Costing	LCC	0.821	
Quality Costing	QC	0.886	
Target Costing	TC	0.856	
Value Chain Costing	VCC	0.916	
<b>Competitive Advantage</b>			
Differentiation	DF	0.976	0.947
Cost Leadership	CL	0.970	

Note: All indicator loadings exceed the recommended threshold of 0.70, and all Average Variance Extracted (AVE) values are greater than 0.50, indicating satisfactory convergent validity (Hair et al., 2021).

Table 8 presents the convergent validity results for the second-order measurement model. As shown in the table, all higher-order indicator loadings exceed the recommended threshold of 0.70, ranging from 0.821 to 0.976, indicating that the first-order dimensions adequately represent their respective higher-order constructs. In addition, the Average Variance Extracted (AVE) values for Competitor Accounting (0.831), Strategic Costing (0.780), and Competitive Advantage (0.947) all exceed the recommended threshold of 0.50 (Hair et al., 2021). These findings confirm that the higher-order constructs demonstrate satisfactory convergent validity and explain a substantial proportion of the variance in their respective first-order dimensions, supporting their suitability for subsequent structural model evaluation.

**Table 9. Discriminant Validity: Fornell-Larcker Criterion**

	Competitor Accounting (X1)	Strategic Costing (X2)	Competitive Advantage (Y)
Competitor Accounting (X1)	<b>0.911</b>		
Strategic Costing (X2)	0.199	<b>0.883</b>	
Competitive Advantage (Y)	0.557	0.236	<b>0.973</b>

Note: Diagonal values (bold) represent the square root of the Average Variance Extracted (AVE). Discriminant validity is established when the square root of AVE for each construct exceeds its correlations with all other constructs (Fornell & Larcker, 1981).

Table 9 presents the discriminant validity assessment for the second-order measurement model using the Fornell–Larcker criterion. Discriminant validity is established when the square root of the Average Variance Extracted (AVE), represented by the diagonal values, is greater than the correlations between each construct and all other constructs (Fornell & Larcker, 1981). As shown in Table 9, the square root of AVE for Competitor Accounting (0.911), Strategic Costing (0.883), and Competitive Advantage (0.973) exceeds their respective inter-construct

correlations. These findings indicate that each higher-order construct is empirically distinct from the others and adequately captures its intended conceptual domain. Therefore, the second-order measurement model demonstrates satisfactory discriminant validity.

**Table 10. Discriminant Validity: HTMT**

	Competitor Accounting (X1)	Strategic Costing (X2)	Competitive Advantage (Y)
Competitor Accounting (X1)			
Strategic Costing (X2)	0.204		
Competitive Advantage (Y)	0.603	0.227	

Note: HTMT values below 0.85 indicate satisfactory discriminant validity (Hair et al., 2021).

Table 10 presents the discriminant validity assessment using the Heterotrait–Monotrait ratio (HTMT), which provides a more rigorous evaluation of construct distinctiveness than the Fornell–Larcker criterion (Hair et al., 2021). As shown in Table 10, all HTMT values are well below the recommended threshold of 0.85, ranging from 0.204 to 0.603. These findings provide additional evidence that the higher-order constructs are empirically distinct from one another and confirm satisfactory discriminant validity of the second-order measurement model.

**Table 11. Reliability Results of the Second-Order Construct**

Construct	Cronbach's Alpha (CA)	Composite Reliability (rho_a)	Composite Reliability (rho_c)
Competitor Accounting	0.897	0.900	0.936
Strategic Costing	0.931	0.978	0.946
Competitive Advantage	0.944	0.951	0.973

Note: Note: All higher-order constructs satisfy the recommended thresholds for internal consistency reliability, with Cronbach's Alpha  $\geq 0.70$  and Composite Reliability  $\geq 0.70$  (Hair et al., 2021).

Table 11 presents the internal consistency reliability results for the second-order measurement model. Reliability was evaluated using Cronbach's Alpha, Composite Reliability (rho\_a), and Composite Reliability (rho\_c). As shown in Table 11, all higher-order constructs satisfy the recommended thresholds, with Cronbach's Alpha values ranging from 0.897 to 0.944 and Composite Reliability values ranging from 0.936 to 0.973 (Hair et al., 2021). These findings indicate that Competitor Accounting, Strategic Costing, and Competitive Advantage demonstrate satisfactory internal consistency reliability. Overall, the second-order measurement model satisfies the recommended reliability criteria and is therefore appropriate for subsequent structural model assessment.

### Structural Model Assessment

Following the satisfactory evaluation of the measurement model, the structural model was assessed to evaluate the explanatory power, predictive capability, and overall model adequacy, as well as to test the proposed hypotheses. The assessment comprised the coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), predictive relevance ( $Q^2$ ), model fit assessment, and hypothesis testing through the bootstrapping procedure. These evaluation criteria provide a comprehensive assessment of both the explanatory and predictive capabilities of the proposed structural model (Hair et al., 2021).

**Table 12. Coefficient Determination**

	R-Square	R-Square Adjusted
Competitive Advantage	0.327	0.314

Note:  $R^2$  indicates the proportion of variance in the endogenous construct explained by the exogenous constructs. Higher  $R^2$  values indicate greater explanatory power of the structural model (Hair et al., 2021).

Table 12 presents the coefficient of determination ( $R^2$ ) for the endogenous construct. As shown in the table, the  $R^2$  value for Competitive Advantage is 0.327, with an adjusted  $R^2$  of 0.314. This indicates that Competitor Accounting and Strategic Costing jointly explain 32.7% of the variance in Competitive Advantage, while the remaining 67.3% is attributable to other factors not included in the proposed model. According to Hair et al. (2021), this result indicates a moderate level of explanatory power, suggesting that the proposed model provides an acceptable level of prediction for the endogenous construct.

**Table 13. Effect Size**

Relationship	f-square
Competitor Accounting → Competitive Advantage	0.402
Strategic Costing → Competitive Advantage	0.024

Note: According to Hair et al. (2021),  $f^2$  values of 0.02, 0.15, and 0.35 indicate small, medium, and large effect sizes, respectively.

Table 13 presents the effect size ( $f^2$ ) of each exogenous construct on Competitive Advantage. Effect size assesses the relative contribution of each predictor to the explanatory power of the structural model after accounting for the presence of other predictors (Hair et al., 2021). As shown in Table 13, Competitor Accounting exhibits a large effect on Competitive Advantage ( $f^2 = 0.402$ ), indicating that it makes a substantial contribution to explaining the endogenous construct. In contrast, Strategic Costing demonstrates a small effect ( $f^2 = 0.024$ ), suggesting that its contribution to the explanatory power of the model is relatively limited. These findings are consistent with the subsequent hypothesis testing, which indicates that Competitor Accounting plays a more influential role than Strategic Costing in explaining the competitive advantage of Muhammadiyah educational institutions.

**Table 14. Predictive Relevance ( $Q^2$ )**

	SSO	SSE	$Q^2 (=1-SSE/SSO)$
Competitor Accounting	321.000	321.000	0.000
Strategic Costing	535.000	535.000	0.000
Competitive Advantage	214.000	150.922	0.295

These results indicate that Competitor Accounting contributes substantially more to the explanatory power of the model than Strategic Costing.

Table 14 presents the predictive relevance ( $Q^2$ ) of the structural model based on the blindfolding procedure. Predictive relevance evaluates the model's capability to accurately reconstruct the observed values of the endogenous construct (Hair et al., 2021). As shown in Table 14, Competitive Advantage achieves a  $Q^2$  value of 0.295, which is greater than zero, indicating that the proposed structural model possesses satisfactory predictive relevance for the endogenous construct. In contrast, Competitor Accounting and Strategic Costing are exogenous constructs; therefore,  $Q^2$  values are not estimated for these variables and are consequently reported as zero.

**Table 15. Model Fit Assessment**

	Saturated model	Estimated model
SRMR	0.054	0.054
d_ ULS	0.159	0.159
d_ G	0.175	0.175
Chi-square	120.534	120.534
NFI	0.869	0.869

Note: An SRMR value below 0.08 indicates a good model fit, while NFI values closer to 1.00 indicate better model fit (Hair et al., 2021).

Table 15 presents the model fit assessment of the proposed structural model. The Standardized Root Mean Square Residual (SRMR) value is 0.054 for both the saturated and

estimated models, which is below the recommended threshold of 0.08, indicating a satisfactory model fit (Hair et al., 2021). In addition, the Normed Fit Index (NFI) is 0.869, suggesting an acceptable level of overall model fit. The discrepancy measures ( $d_{ULS} = 0.159$  and  $d_G = 0.175$ ) are also reported as supplementary model fit statistics. Overall, these results indicate that the proposed structural model adequately represents the observed data and is appropriate for hypothesis testing.

**Table 16. Hypothesis Testing Results**

Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Decision
H1	0.531	0.520	0.089	5.936	0.000	Supported
H2	0.130	0.146	0.116	1.125	0.261	Not Supported

Table 16 presents the results of the structural path analysis obtained through the bootstrapping procedure. The results indicate that Competitor Accounting has a positive and statistically significant effect on Competitive Advantage ( $\beta = 0.531$ ,  $t = 5.936$ ,  $p < 0.001$ ), thereby supporting Hypothesis 1 (H1). This finding suggests that higher levels of competitor accounting are associated with greater competitive advantage among Muhammadiyah educational institutions.

In contrast, Strategic Costing does not exhibit a statistically significant effect on Competitive Advantage ( $\beta = 0.130$ ,  $t = 1.125$ ,  $p = 0.261$ ). Therefore, Hypothesis 2 (H2) is not supported. Although the estimated relationship is positive, the effect is insufficient to reach the conventional level of statistical significance.

**Discussion**

This study examined the influence of two selected SMAT dimensions on the competitive advantage of Muhammadiyah educational institutions in Riau Province, grounded in the Resource-Based View framework. The findings reveal a differentiated pattern of effectiveness between competitor accounting and strategic costing within this distinctive organizational context, offering meaningful insights into how organizational mission shapes the strategic utility of accounting information.

The positive and significant influence of competitor accounting on competitive advantage reflects a theoretically coherent finding. Competitor accounting, by its nature, orients decision-makers outward toward the competitive landscape, the positioning of rival institutions, and the strategic intelligence needed to identify and respond to emerging threats and opportunities (Guilding, 1999; Rashid et al., 2020). In the AUM context, where schools operate under growing competitive pressure following curriculum reforms such as MBKM, this outward orientation is particularly valuable. School principals who systematically monitor competitor positions and assess competitor performance are better equipped to identify strategic gaps, differentiate their institutional offerings, and sustain their relevance in an increasingly competitive educational environment. This logic is consistent with the RBV argument that competitor accounting functions as a strategic informational resource, one that enables organizations to act on environmental intelligence that competitors may not possess or effectively utilize (J. Barney, 1991).

What makes this finding particularly meaningful in the AUM context is that the value of competitor intelligence does not depend on profit orientation. Whether an institution seeks financial returns or pursues a mission of Islamic education and community service, understanding the competitive environment remains a fundamental prerequisite for strategic sustainability. This cross-contextual relevance of competitor accounting is supported by Guilding (1999), who found competitive position monitoring to be the most widely used and most helpful

competitor-focused practice even among profit-oriented firms, and by Ditkaew (2023), who confirmed a positive relationship between strategic management accounting and competitive advantage in an Asian context grounded in RBV. The consistency of this finding across diverse organizational settings reinforces the view that competitor-oriented accounting information constitutes a genuinely strategic resource whose value extends across different organizational missions and priorities (Astuti et al., 2020; Egbuhuzor et al., 2021).

These findings are also consistent with recent developments in the Strategic Management Accounting literature, which increasingly emphasize that accounting information creates strategic value only when aligned with organizational strategy and institutional objectives rather than being applied as universally effective techniques. Contemporary studies argue that competitor-oriented information enhances organizational responsiveness by enabling decision-makers to anticipate environmental change and strengthen strategic positioning, particularly in service-oriented and knowledge-intensive organizations (Cescon et al., 2019; Su et al., 2023). The present findings extend this perspective by demonstrating that such strategic benefits also apply within faith-based educational institutions, where organizational success is defined not solely by financial outcomes but also by mission fulfillment and educational sustainability.

The finding that strategic costing does not demonstrate a significant influence on competitive advantage in the AUM context is an equally important result that deserves careful theoretical consideration. Strategic costing encompasses a set of techniques including target costing, life cycle costing, and value chain costing, that are fundamentally rooted in cost optimization logic (Cadez & Guilding, 2008; Junaedi et al., 2018). This logic presupposes that organizations make resource allocation decisions primarily on the basis of cost efficiency and financial returns. In profit-oriented firms, where cost leadership is a recognized pathway to competitive advantage, strategic costing aligns naturally with organizational priorities and has demonstrated meaningful contributions to competitive positioning (Adigbole et al., 2022; Marlina & Tjahjadi, 2020).

In AUM schools, however, the institutional logic operates differently. Resource decisions in these organizations are guided not primarily by cost efficiency but by Islamic organizational values, community service commitments, and educational mission (Ahmad, 2017). Within this value system, cost minimization is not the dominant strategic imperative, and the techniques associated with strategic costing may therefore carry limited relevance in translating into competitive advantage. In other words, strategic costing may be a technically sound set of practices, but its strategic contribution appears to depend on an organizational environment where cost structures are actively managed as competitive levers, a condition that does not straightforwardly characterize AUM institutions. This interpretation is consistent with Barney's (1991) RBV argument that the strategic value of any resource is contingent upon the organizational context in which it is deployed and cannot be assumed to be uniform across all institutional settings.

A further explanation may be found in the distinctive governance characteristics of Muhammadiyah educational institutions. Unlike commercial organizations, school principals generally operate within predetermined educational budgets and are expected to prioritize educational quality, student development, and social responsibility over cost minimization. Consequently, opportunities to employ strategic costing as a competitive mechanism are relatively limited because many financial decisions are constrained by organizational policies, educational standards, and stakeholder expectations. Under these conditions, improving competitive advantage depends less on reducing costs and more on strengthening institutional reputation, educational innovation, service quality, and stakeholder trust. This suggests that strategic costing may contribute indirectly through better resource stewardship rather than directly enhancing competitive advantage, indicating a potential mediation or contingency relationship that warrants further investigation in future studies.

Recent Strategic Management Accounting research also suggests that the effectiveness of strategic costing depends on the extent to which costing information is embedded within strategic decision-making processes rather than merely being available for operational control. In organizations where strategic priorities emphasize service quality, stakeholder value, and long-term mission fulfillment, cost information tends to play a supporting rather than dominant role in strategic decision making (Cescon et al., 2019; Endenich & Trapp, 2020). This perspective provides additional support for the present findings, indicating that the limited influence of strategic costing in AUM schools reflects not the inadequacy of the technique itself, but rather the institutional priorities that determine how accounting information is utilized.

This finding is also consistent with the broader pattern of mixed evidence in the SMAT literature. Thapayom (2019) and Valdiansyah & Augustine (2021) similarly reported no significant relationship between certain SMAT dimensions and competitive advantage, while Guilding (1999) noted that strategic costing ranked lowest in both usage and perceived helpfulness even among profit-oriented practitioners. Taken together, these results suggest that the effectiveness of strategic costing may be shaped by organizational context, and that institutional mission and values may represent an important boundary condition for future research to explore more explicitly.

From a Resource-Based View perspective, these findings suggest that the strategic value of management accounting information is not an inherent characteristic of the accounting techniques themselves but is contingent upon the organizational context in which they are deployed. Consistent with the Resource-Based View, resources create competitive advantage only when they are valuable within a specific organizational context. The present findings further demonstrate that organizational mission and institutional values determine whether strategic management accounting information is perceived and utilized as a strategic resource. In values-based educational institutions such as Muhammadiyah schools, competitor-oriented information appears to satisfy these strategic conditions more effectively than cost-oriented information because it directly supports institutional positioning, educational differentiation, and long-term mission sustainability. Accordingly, this study extends RBV by highlighting organizational mission as an important contextual condition that shapes the strategic value of management accounting resources.

#### **4. Conclusion**

This study examined the influence of competitor accounting and strategic costing on the competitive advantage of Muhammadiyah educational institutions in Riau Province, Indonesia, from the Resource-Based View (RBV) perspective. The findings demonstrate that competitor accounting has a positive and significant effect on competitive advantage, whereas strategic costing does not significantly influence competitive advantage within the Muhammadiyah educational context. These results indicate that the effectiveness of Strategic Management Accounting Techniques (SMAT) depends on organizational mission and institutional values, suggesting that the strategic value of management accounting information is context-dependent rather than universally applicable across different organizational settings.

The study contributes to both the Strategic Management Accounting and Resource-Based View literature by showing that organizational mission serves as an important contextual condition influencing the strategic value of management accounting information. While the RBV argues that valuable resources create competitive advantage when aligned with organizational strategy, the present findings demonstrate that accounting information becomes strategically valuable only when it is compatible with an organization's mission, institutional values, and decision-making logic. In Muhammadiyah educational institutions, competitor accounting represents a valuable strategic resource because it supports institutional adaptation, environmental responsiveness, and competitive positioning. In contrast, strategic costing

contributes less to competitive advantage because organizational priorities are primarily directed toward educational quality, Islamic values, and community service rather than cost leadership. These findings therefore extend the RBV by highlighting organizational mission as an important determinant of the strategic value of accounting information.

From a practical perspective, the findings suggest that Muhammadiyah educational leaders should institutionalize competitor intelligence by regularly monitoring competing schools' academic programs, accreditation achievements, student enrolment trends, tuition policies, and educational innovations, and integrating this information into strategic planning processes. Muhammadiyah educational authorities are also encouraged to strengthen collaborative benchmarking by facilitating the exchange of strategic information and best practices among schools. Furthermore, leadership development programs should enhance principals' strategic analysis capabilities so that external environmental information can be translated into long-term institutional strategies. Rather than emphasizing cost reduction, Muhammadiyah schools should prioritize mission-aligned resource optimization by investing in teacher development, curriculum innovation, digital transformation, and educational quality improvement to strengthen sustainable competitive advantage while remaining consistent with Muhammadiyah's educational philosophy.

This study is subject to several limitations. First, the sample was limited to Muhammadiyah educational institutions in Riau Province, which may restrict the generalizability of the findings to other regions or educational systems. Second, the cross-sectional research design captures organizational conditions at a single point in time and therefore cannot explain changes in strategic management accounting practices over time. Third, the study relied on self-reported questionnaire data from school principals, making the results potentially vulnerable to common method bias and respondent subjectivity despite statistical procedures employed to minimize these risks. In addition, several first-order constructs were measured using single-item indicators which, although theoretically justified for narrowly defined constructs, may not fully capture the multidimensional characteristics of strategic management accounting practices. Future research is therefore encouraged to employ longitudinal research designs, involve broader samples across different provinces and other faith-based educational organizations, and examine whether organizational mission moderates the relationship between Strategic Management Accounting Techniques and competitive advantage. Future studies may also investigate potential mediating mechanisms, such as strategic decision-making capability, organizational learning, or innovation capability, while employing fully multi-item measurement constructs to improve construct validity and provide a more comprehensive understanding of how strategic management accounting contributes to sustainable competitive advantage in mission-driven organizations

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