

MODERATING EFFECT OF GOVERNANCE POLICIES BETWEEN STRATEGIC HUMAN RESOURCE MANAGEMENT PRACTICES AND ORGANIZATIONAL PERFORMANCE OF HALAL FOOD MANUFACTURING IN MALAYSIA

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Received: 11.08.2026

Accepted: 10.05.2026

ABSTRACT

Background and Purpose: In Malaysia, the process of positioning halal-branded products internationally has challenges in enhancing the performance and management of halal food manufacturers. This underscores the necessity of integrating human resources, strategic management, and governance policies (PTU) to enhance performance while remaining competitive in the sector. This paper addresses the connection between Strategic Human Resource Management (SHRM) as well as organization performance based on the governance policy as a moderating variable in enhancing halal awareness among the food manufacturers

Methodology: The study utilized a quantitative design, as it was based on the Resource-Based View (RBV) as well as Institutional Theory (IT), which required gathering data from 265 respondents in Malaysian companies producing halal-certified food via purposive sampling. Statistical analysis was performed descriptively and inferentially using SPSS and SmartPLS 4 software.

Findings: The evaluation indicates that both SHRM and governance policy exert a substantial influence on organizational performance (OPERF). However, the policy of governance fails to significantly influence the connection between SHRM as well as performance. These findings indicate the relevance of measures to improve governance, development of halal talents, and SHRM practices within the halal food sector.

Contributions: As educators and policymakers, there is a need to inculcate a combination of halal governance principles and SHRM frameworks into curriculum and training programs. This provides food manufacturers with knowledge and expertise to abide by regulatory frameworks and increase competitiveness in the global arena. The paper contains important insights for the stakeholders as it highlights the strategic nature of SHRM and PTU in enhancing a sustainable and competitive halal ecosystem.

Keywords: Governance policies (PTU), strategic human resource management (SHRM), organizational performance (OPERF), halal food manufacturing, Malaysia.

Cite as: Abdul Malek, J., Lim, S., & Tahir, Z. (2026). Moderating effect of governance policies between strategic human resource management practices and organizational performance of halal food manufacturing in Malaysia. *Journal of Nusantara Studies*, 12(1), 20-36. <http://dx.doi.org/10.24200/jonus.vol12iss1pp20-36>

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1.0 INTRODUCTION

The growth of industries centered on halal products and services is not a recent phenomenon; it has been expanding quickly and demands strong performance in food manufacturing to satisfy the varied needs of consumers from different racial and religious backgrounds, while supporting the delivery of halal services to the market (De Boni & Forleo, 2019). Thus, the halal concept is considered crucial for food businesses to expand across demographic as well as geographic boundaries. It helps ensure adherence to established standards of safety, health, as well as hygiene, which are consistently upheld and assured (Mohd Daud et al., 2023). Over the preceding decade, the halal food industry witnessed significant expansion, reaching an estimated value of about USD 6.9 trillion. This robust expansion is largely fueled by the rising global Muslim population, projected to increase from 1.8 billion in 2018 to 2.5 billion by 2050 (EPU, 2023). Malaysia has also been actively working to ensure that its domestically produced halal brands can successfully enter the international market through strategic planning. According to the 12th Malaysia Plan, the country's halal product exports are forecasted to contribute MYR 56 billion by 2025 (EPU, 2023). This encouraging progress has heightened awareness among both domestic and international stakeholders of Malaysia's capability to deliver high-standard, market-driven, and halal products that are Shariah-compliant, aligning with the demands of Muslim consumers globally. This demonstrates that the attainment of significant confidence in Malaysia's halal sector, as well as backing from international markets, which in turn promotes foreign investment across multiple industries in the country, including food, pharmaceuticals, tourism, as well as cosmetics (Halal Development Corporation, 2020). De Boni and Forleo (2019) even reported that most research involving empirical analysis or country-specific cases in halal research frequently references Malaysia's halal ecosystem and acknowledged Malaysia's efforts in establishing good governance policy worldwide. For example, in the Italian context, only two studies by Di Foggia et al. (2011) and De Boni and Forleo (2019) have focused on halal studies in Italy, a non-Muslim majority country. A majority of Muslim countries, such as Indonesia, Rahayu et al. (2025) also carried out a study on purchasing decisions for halal products, which cites other Malaysian studies, for instance, Hanaysha (2018), Jaiyeoba et al. (2023), and Khan et al. (2022).

Nevertheless, in spite of the expansion related to the halal food industry, a dearth of research addressing the impact of internal as well as external elements on the performance of halal food businesses persists, leaving the area largely underexplored. Although De Boni and Forleo (2019) has referred to the same theories as in our study (ie. RBV and Institutional Theory (IT)) to determine internal as well as external aspects for their halal research in Italian context, their study has focused on pasta industry by using market orientation, halal governance system, global halal market competition and perceived market benefits by consumer as external factors. In our research, the focus of our variables is more on strategic human resource management (SHRM) as an internal factor, as well as governance policy as the external factor. In this paper, the term governance policies are denoted by the abbreviation PTU, derived from the Malay term *Polisi Tadbir Urus*, and is used interchangeably with the broader term corporate governance found in the international literature. Furthermore, there is little research on halal food performance that incorporates human resource dimensions, and the moderating role of PTU towards halal food performance has not been deeply investigated by using a quantitative approach. Earlier works on halal food performance have instead focused on other variables, such as certification, knowledge, as well as supply chain aspects (Ab Talib et al., 2020; Abdul Rashid et al., 2020). Studies exploring halal food manufacturing effectiveness within the context of both internal management, like SHRM, as well as external management, including PTU, remain scarce (Othman et al., 2019). The present work seeks to assess determinants affecting the organizational performance (OPERF) within Malaysian halal food manufacturing companies by employing a quantitative approach and Structural Equation Modelling (SEM)

through Smart-PLS. This work seeks to discuss the gaps in prior studies by evaluating the relationships and associations between OPERF as well as the management of both internal and external factors within halal food companies. As compared to De Boni and Forleo (2019), their halal study was conducted among stakeholders in the pasta industry by using a qualitative method, the Delphi technique, and interviews for an exploratory study methodology.

2.0 LITERATURE REVIEW

2.1 The Relationship Between SHRM and OPERF

Within the research framework, SHRM is proposed to directly and positively impact OPERF. This assertion is supported by multiple empirical research (Battour et al., 2021; Chineye & Ogohi, 2020). From a universal standpoint, a direct link is assumed between SHRM as well as OPERF. This relationship may be understood via the lens of the RBV theory, which argues that SHRM enhances competitive advantage as well as OPERF by cultivating distinctive, hard-to-replicate, as well as irreplaceable human capital (Collins, 2021). Thus, based on this theory, SHRM has a positive impact on OPERF because it fosters a competitive edge in human resources by encouraging employee behaviors that enhance overall performance (Al-Khaled et al., 2020). In light of prior research demonstrating a positive association, as discussed above, this study hypothesizes that:

H1: SHRM is positively associated with OPERF.

2.2 The Relationship Between PTU and OPERF

Every halal food production business contributes to fulfilling consumer demands and ensuring satisfaction, which includes preserving the halal authenticity of all food and beverages offered. Consequently, according to Hazban and Nasohah (2023) all food businesses must comply with regulations as well as legal requirements to guarantee that halal and tayyib standards are consistently maintained. In addition, PTU impacts OPERF as well as indicates a positive correlation between strong governance practices as well as both operational and financial outcomes (Yusoff & Alhaji, 2024). Moreover, the Malaysian Halal Certification Procedure Manual (MPPHM) 2020 provides guidelines with regard to improving halal application processes and halal assurance systems. It has also been shown to exert a positive influence on OPERF as well as strengthen companies' competitive advantage (Ali et al., 2022; Tan & Lim, 2024). In addition, research by Nguyen and Tran (2021) indicates that PTU can have a significant influence on organizational outcomes. Based on these prior findings demonstrating a positive relationship, this study put forward the following:

H2: PTU is positively associated with OPERF.

2.3 PTU Moderate the Relationship Between SHRM and OPERF

Governance policy, and also known as *Polisi Tadbir Urus* in Malay terms (PTU) is hypothesized to play a critical role in shaping the relationship between Strategic Human Resource Management (SHRM) and organisational performance (OPERF). Prior empirical literature suggests that while SHRM practices are essential to sustain a competitive advantage and elevate organisational outcomes (Barney & Hesterly, 2019; Chineye & Ogohi, 2020), this strategic linkage can be further optimized and reinforced through robust corporate governance frameworks (Huselid et al., 1997; Martin et al., 2016).

To establish clear theoretical boundaries within this study, a sharp conceptual distinction is maintained between internal and external mechanisms. Therefore, SHRM refers

strictly to internal human resource practices, such as recruitment, training, performance appraisal, and compensation systems. Conversely, governance policy (PTU) encompasses the external regulatory, compliance, and coercive pressures that firms must strictly observe within the industry. Figure 1 depicts the conceptual framework for this study.

It is important to note that although top management commitment operates within the firm, it remains conceptually distinct from SHRM. The core focus of top management is centered on strategic governance and oversight, whereas SHRM is dedicated specifically to the operational design of human resource practices. According to Ramli et al. (2020), top management dedication serves as an internal driver of halal compliance. In the context of this framework, such dedication is viewed as the necessary internal organizational response required to effectively execute external PTU mandates. Therefore, PTU and SHRM represent separate constructs, operationalized as external compliance enforcement and internal resource design, respectively. Based on these theoretical and empirical insights, this study proposes the following hypothesis:

H3: Governance Policy (PTU) moderates the relationship between Strategic Human Resource Management (SHRM) and organizational performance (OPERF).

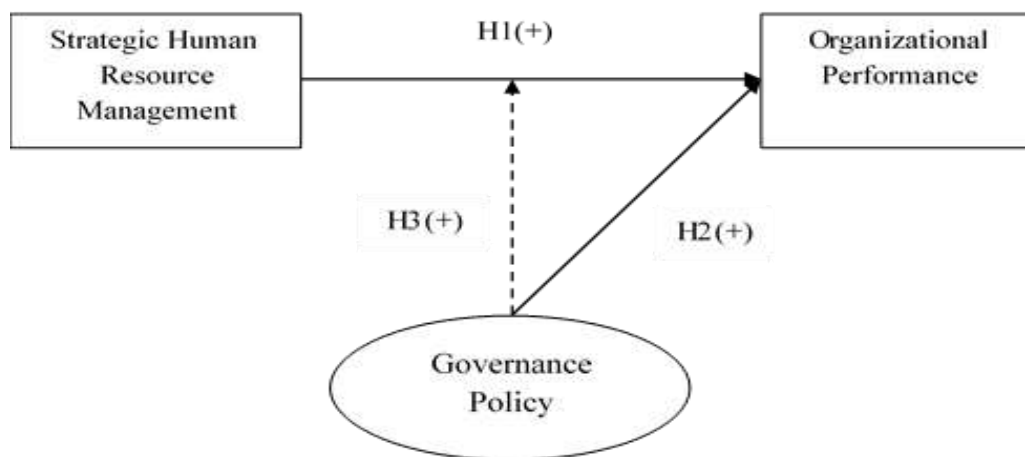


Figure 1: Conceptual framework

3.0 RESEARCH DESIGN

This research utilizes a purposive sampling approach, targeting halal food manufacturing firms that possess halal certification. The purposive sampling technique is applied since the population consists of individuals meeting specific eligibility criteria (Ngah et al., 2023; Sarstedt et al., 2022). Halal food manufacturers constitute the core segment of Malaysia's halal food production industry. Participants in this survey held senior management roles, like operations or quality managers, as well as positions in relation to halal executive functions or halal committee memberships, such as managing directors of micro, medium, small, along with large enterprises in Malaysia.

3.1 Study Population

The participants included in this work consist solely of firms listed with the Department of Islamic Development Malaysia (JAKIM), while any companies whose halal certifications have lapsed are excluded. This research targets all organizations in Malaysia that implement the halal food concept. The study's locations were selected based on guidance from prior studies, which highlighted the need for broader investigation throughout Malaysia, as earlier studies

primarily focused on Peninsular Malaysia and largely overlooked East Malaysia, including Sarawak, Sabah, as well as Labuan. To address this gap, the present study has been conducted in all states of Malaysia. Additionally, the study population consists of halal food manufacturing firms listed in the JAKIM Halal Directory 2023. The directory offers detailed information on halal food manufacturing companies across Malaysia, such as their names, addresses, phone numbers, email contacts, as well as product listings. Upon examining the compilation, it was discovered that Malaysia had 6,565 halal food manufacturers in 2023, spanning various subsectors and ranging from micro, small, as well as medium enterprises to large-scale companies. However, the amount of data was only valid for that time frame because the companies' numbers are constantly changing due to some companies failing to renew their halal certification. Initially, JAKIM will only list and recognize those companies that successfully renew their halal licenses, as the halal license may have an expiration and must be checked regularly. Therefore, the unlisted companies in the JAKIM directory are not qualified to be included as respondents during the data collection period, as they fail to satisfy the criteria of this research.

3.2 Sampling Techniques

For the present research, the investigator applied purposive sampling, also known as selective or subjective sampling, in which organizations were identified from the Halal Directory of JAKIM. The respondents have been chosen selectively to meet the study's objectives, ensuring that all participants possessed specific required characteristics (Nghah et al., 2023; Rowley, 2014). Most respondents were registered to attend halal training organized by the Halal Training Institute (HTI) of HDC or held any positions that were involved in practicing halal operations at their organizations.

3.3 Sample Size

For this study, the number of halal food manufacturing firms in Malaysia is considerable. As noted by Hair et al. (2019a), the sample size should be established using statistical power analysis, which identifies the lowest number of observations needed, given the complexity of the model. The present study has successfully obtained 305 responses in total, surpassing the minimal sample size requirement of 85. Moreover, having a larger sample can boost the generalizability of the outcomes and offer a stronger and more dependable insight into the studied phenomenon. Finally, we managed to gather 265 usable responses after data screening from 305, as we must remove 9 incomplete responses and 31 outlier responses for further analysis.

3.4 Measurements

The measurement scales for this study were adapted from established frameworks and evaluated using a 7-point Likert scale. Specifically, the Strategic Human Resource Management (SHRM) construct was modified from Gurbuz and Mert (2011), the governance policies (PTU) instrument was derived from Latif et al. (2020), and organizational performance (OPERF) was adapted from Aminah Baharuddin (2020). While Gurbuz and Mert (2011) offers a robust foundation for evaluating internal human resource practices, the instruments by Latif et al. (2020) and Amaninah Baharuddin (2020) provide unique empirical strengths tailored to institutional pressures and the halal sector, respectively. Because both latter scales were developed and validated within the Malaysian context, synthesizing these instruments ensures superior contextual relevance and stronger content validity for the target population of Malaysian halal food manufacturers compared to generic global scales. Consequently, this integrated measurement framework accurately captures both the internal operational design of

SHRM and the unique institutional characteristics of the Malaysian halal industry.

3.5 Data Collection Process and Research Ethical Conduct

The process related to data collection for this investigation was executed with a major focus on ethical research standards and strict methodological procedures. To guarantee the accuracy and consistency of the research tool, a preliminary test was carried out before the primary data collection. The design of the questionnaire was further refined in this pre-test with the aim of ensuring that the questionnaire was clear in language, minimized mistakes, and estimated the time spent on the questionnaire (Amaya et al., 2020). The pre-test included seven professionals: three Senior Lecturers and an Associate Professor in the Faculty of Business, Economics and Social Development, Faculty of Fisheries and Food Science at UMT, and two senior officers and one officer of HDC, one officer of HDC academy (HTI), and one halal executive officer of the Terengganu Entrepreneur Foundation (YPU). The input of these professionals helped to enhance relevance, ease of administration, and clarity of the instrument. Moreover, an English language specialist performed a face validity test to assess and improve language fluency, understanding, and sentence structure according to expert feedback.

The pre-test was subsequently succeeded by a pilot study aimed at evaluating the reliability and validity of the instrument to conform to the objectives of the study (Creswell & Creswell, 2018; Sundram & Romli, 2023). The pilot study also assisted in the identification of uncertainties and developing the questionnaire items. The investigation was executed in the Kuala Terengganu region of the Terengganu state, given its leading role in halal food production, where there are more than 100 registered halal companies in the area. Partnership with YPU has helped the researcher to issue questionnaires to interested companies and representatives, especially those who participated in halal food seminars that YPU organizes.

Then the primary data collection was performed utilizing the questionnaire of Google Forms online survey. This survey link has been shared in different online platforms, such as Facebook, Telegram, and WhatsApp groups, which are run by the Halal Training Institute. These channels were used to focus on respondents who have a valid halal certification and a position associated with the production and management of halal food. The group administrators distributed the questionnaire link and urged their colleagues in the halal industry to share the questionnaire.

The researchers used the Halal Malaysia Directory offered by JAKIM to reach out to a selected number of organizations directly to supplement online distribution. Phone calls were made to verify attendance and prevent cases of duplication, and to prevent directing ineligible individuals. This process was tedious because some organizations were not willing to take part in the process of data collection. Nonetheless, teaming up with various agencies like HDC, HTI, and YPU has successfully increased respondents' participation among halal talents and those specific persons or positions who deal with food quality and operation.

Thus, the process of collecting the data commenced during October 2022 through June 2023, with responses closely followed and controlled during the process. The procedures followed all the principles of ethics, where the respondents were kept confidential and were free to participate in the entire process. Ethical considerations were taken seriously as responsible researchers because we pre-tested the survey to determine its reliability and validity. A formal letter by the faculty was also included to authenticate the process of data collection. Additionally, all survey questions were carefully designed to avoid sensitivity or discomfort for respondents, and participation was completely voluntary, with respondents having the freedom to discontinue at any point without coercion or obligation to complete. Prior to completing the online survey for this study, written informed consent was gathered from each participant. Furthermore, we confirmed that our study adheres to the Declaration of Helsinki dated 13th December 2024, that respect human participation in the survey and does

not involve vulnerable people.

4.0 ANALYSIS AND DISCUSSION

4.1 Data Screening and Outliers

Data screening represents an essential initial phase in multivariate analysis, as it enables researchers to detect breaches of multivariate assumptions (Hair et al., 2010; Islam, 2020). Moreover, conducting preliminary data screening allows researchers to gain a deeper insight into the gathered data (Pallant, 2020). For the present research, 305 questionnaires underwent evaluation to guarantee that every item was completed. In this study, there is no missing data involved, as the survey questions have been configured in *Google Forms* to require mandatory responses before proceeding to the next section. The evaluation showed that 9 questionnaires were omitted as they did not satisfy the researcher's criteria or were incomplete, resulting in a total of 296 questionnaires. Following this review, all remaining questionnaires were systematically coded and input into the Statistical Package for the Social Sciences (SPSS) software for preliminary examination prior to analysis. Following this, all submitted data were collected without errors; however, 31 respondents were removed given the extreme values, leaving a final sample of 265 participants for this work. Additionally, a normality assessment was performed by evaluating multivariate skewness as well as kurtosis employing Web Power. The analysis showed that Mardia's multivariate skewness ($b = 19.75446$, $p < 0.01$) and multivariate kurtosis ($b = 62.16976$, $p < 0.01$) were significant, indicating that the data deviated from normality. Hence, employing SmartPLS4 software was considered suitable for this research.

4.2 Common Method Variance (CMV) Test

In this study, the CMV was assessed using the Variance Inflation Factor (VIF). Hair et al. (2022) noted that multicollinearity can be identified when VIF values exceed 5, while a full collinearity approach (Kock, 2021) was applied with regard to the analysis. Correspondingly, a VIF value of 3.3 or above indicates potential issues with CMV. In the current work, all VIF values fell under the 3.3 cutoff, suggesting that CMV is not a major issue. Results from the full collinearity evaluation are presented in Table 1.

Table 1: Results for full collinearity test

Construct	VIF
SHRM	1.304
PTU	1.260
OPERF	2.161

4.3 Descriptive Analysis

Table 2 displays the descriptive statistics as well as the demographic characteristics involving 265 participants, shown as percentages, representing employees responsible for halal processes in Malaysian Food Manufacturing Companies.

Table 2: Demographic characteristics of the respondents of halal food manufacturers in Malaysia

Demographic characteristics		Frequency (n=265)	Percentage (%)
Gender	Male	52	19.6
	Female	213	80.4
Age	20-29	35	13.2
	30-39	170	64.2
	40-49	52	19.6
	50-59	8	3.0
Races	Malay	258	97.4
	Chinese	3	1.1
	Indian	3	1.1
	Others	1	0.4
Educational level	SPM	9	3.4
	Diploma	11	4.2
	Degree	229	86.4
	Master	16	6.0
	Ph.D	0	0.0
	Professional or other	0	0.0
Position	Owner	20	7.5
	General Manager	4	1.5
	Chief Executive Officer	2	0.8
	Manager	25	9.4
	Halal Executive	151	57.0
	Quality Assurance	32	12.1
	Quality Control	19	7.2
	Others	12	4.5
Industrial experience	1-4 years	33	12.5
	5 and less than 10 years	169	63.8
	More than 10 years	63	23.8
Halal-certified companies' status	Yes	265	100.0
	No	0	0.0
Companies' categories	Micro	13	4.9
	Small	59	22.3
	Medium	145	54.7
	Large size	48	18.1
Business Scope/Level	National level	65	24.5
	International level	200	75.5
Business operation/tenure	Less than a year	1	0.4
	1-5 years	8	3.0
	6-10 years	28	10.6
	11-15 years	127	47.9
	16-20 years	68	25.7
	More than 21 years	33	12.5
Company Type	Bumiputera	66	24.9
	Non Bumiputera	199	75.1

4.4 Measurement Model

The measurement model suggests that the initial stage seeks to examine the individual item reliability, internal consistency reliability, convergent validity, as well as discriminant validity (Hair et al., 2019b). The consistency of each item in this study was evaluated using the outer loadings of the constructs, following standard guidelines, where item loading values ranging from 0.40 and more than 0.70 are maintained. Items must be discarded if eliminating them elevates the Composite Reliability (CR) or the Average Variance Extracted (AVE). For this

present research, the CR coefficient was employed with the aim of evaluating the internal consistency reliability related to the model. This is in compliance with the standard guideline requiring CR values to surpass 0.70. Then, convergent validity was examined by calculating the AVE for all latent constructs, in line with the recommendations of Fornell and Larcker (1981). In addition, to satisfy the criteria for convergent validity, this research evaluated all constructs within the measurement model. In general, this procedure was conducted to enhance the AVE standard in convergent validity, in which the AVE for each assessed construct or variable should exceed 0.50 (see Table 3).

Table 3: Convergent validity for reflective measurement

Construct	Indicator	Standardized Loading	Cronbach's Alpha	CR	AVE	Output
OPERF	OPERF1	0.786	0.932	0.957	0.648	accepted
	OPERF2	0.812				
	OPERF3	0.835				
	OPERF4	0.831				
	OPERF5	0.833				
	OPERF6	0.770				
	OPERF7	0.828				
	OPERF8	0.765				
	OPERF9	0.782				
SHRM	PSSM2	0.609	0.891	0.900	0.504	accepted
	PSSM3	0.666				
	PSSM4	0.733				
	PSSM5	0.710				
	PSSM6	0.719				
	PSSM7	0.752				
	PSSM8	0.663				
	PSSM9	0.722				
	PSSM10	0.731				
	PSSM11	0.775				
PTU	PTU1	0.630	0.886	0.906	0.519	accepted
	PTU 2	0.730				
	PTU 3	0.750				
	PTU4	0.725				
	PTU5	0.774				
	PTU6	0.727				
	PTU7	0.725				
	PTU8	0.740				
	PTU9	0.673				

Indicator: Strategic Human Resource Management (SHRM/PSSM), Organizational Performance (OPERF/OP), Governance Policies (PTU)

4.4.1 Discriminant Validity

The last step in evaluating the measurement model entails performing discriminant validity analysis with the purpose of determining how well a construct is differentiated from other constructs depending on empirical criteria. According to recent studies, discriminant validity is considered achieved when every Heterotrait-Monotrait (HTMT) ratio value is lower than 0.85 (Franke & Sarstedt, 2019). As suggested, Table 4 shows that every value remains under 0.9.

Table 4: Discriminant validity (Heterotrait-Monotrait (HTMT))

	OPERF	SHRM	PTU
OPERF			
SHRM	0.432		
PTU	0.247	0.255	

Indicator: Strategic Human Resource Management (SHRM/PSSM), Organizational Performance (OPERF/OP), Governance Policies (PTU)

4.5 Structural Model

The PLS-SEM approach refers to the regression analysis and indicates that multicollinearity issues do not pose a significant problem in the present work, which is essential. The results reveal that every VIF value is under five, in line with the recommendation proposed by Hair et al. (2019a), verifying that collinearity does not constitute a major problem. Direct and moderating effects were estimated using percentile bootstrapping (Chin, 1998) with 5,000 resamples at a 95% confidence interval. Hypotheses are considered supported when the beta coefficients correspond with the suggested expectations, t-values are ≥ 1.645 , and p-values are ≤ 0.05 (Hair et al., 2019a). Table 5 presents the results of all hypothesis tests, indicating that the link between SHRM→OPERF ($\beta = 0.25$, $t = 4.243$, $p \leq 0.01$) supports H1. The link between PTU and OPERF ($\beta = 0.097$; $t = 1.711$; $p = 0.044$) also supports H2, confirming that both direct hypotheses (H1 and H2) are validated, though at the $p < 0.05$ level rather than $p < 0.01$. The bootstrapped t-value is 1.711 ($p = 0.044$), which is significant at the 0.05 level.

The moderating effect of governance policy (PTU) on the relationship between SHRM and organisational performance (OPERF) was assessed using the two-step approach recommended by Becker et al. (2018). The interaction term ($PTU \times SHRM$) was not statistically significant ($\beta = -0.074$, $t = 1.127$, $p = 0.130$), indicating that PTU does not moderate the relationship between SHRM and OPERF. Therefore, H3 is rejected. According to Hair et al. (2022), a non-significant interaction effect indicates that there is insufficient empirical evidence to conclude that the moderator changes the strength or direction of the relationship between the predictor and the outcome variable. Consequently, the relationship between SHRM and organisational performance remains consistent regardless of the level of governance policy.

Table 5: Overall results of hypothesis testing

Relationship	Path Coefficient (β)	Std Error	t-value	p-value	Results	R ²	f ²	Effect Size	VIF
SHRM --> OPERF	0.25	0.059	4.243	p<0.01	Accepted	0.553	0.117	Modest	1.304
PTU --> OPERF	0.097	0.057	1.711	p<0.05	Accepted		0.015	Weak	1.26
PTU x SHRM -> OPERF	-0.074	0.066	1.127	0.130	Rejected		0.01	Weak	

Figure 2 is presented solely as a graphical illustration of the estimated interaction pattern. Consistent with the statistical findings, the plotted lines exhibit no meaningful divergence, and

therefore should not be interpreted as evidence of a conditional or mitigating effect. Instead, the results indicate that SHRM and PTU contribute independently to organisational performance through their respective direct effects, without PTU altering the effect of SHRM on organisational performance. Within the framework of the current research, the degree of the endogenous latent variable (OPERF) R^2 is in the accepted range. As such, 55.3% ($R^2 = 0.553$) regarding the variation was accounted for by SHRM as well as PTU, whereas the rest of 44.7% was attributed to other aspects. Furthermore, as noted by Hair et al. (2019b), a higher R^2 value corresponds to an optimal proportion of variance explained. This implies that a stronger link between the variables being examined leads to a more robust model. In other words, the R^2 value demonstrates that only 55.3% of the variance in the dependent variable can be attributed to the independent variables. According to Hair et al. (2022), the R^2 value for OPERF reflects a significant level of influence. Regarding Effect Size (f^2), Hair et al. (2022) indicated that f^2 values can be interpreted as follows: 0 to 0.10 represents a weak effect, 0.11 to 0.30 a modest effect, 0.31 to 0.50 a moderate effect, while values higher than 0.50 indicate a robust effect. As presented in Table 5, the overall hypothesis testing results reveal that only the connection between SHRM → OPERF demonstrates a modest effect size, whereas the other supported hypotheses exhibit weak effect sizes. Figure 2 depicts the moderating role of governance policy (PTU) on the relationship between SHRM as well as OPERF in halal food manufacturing.

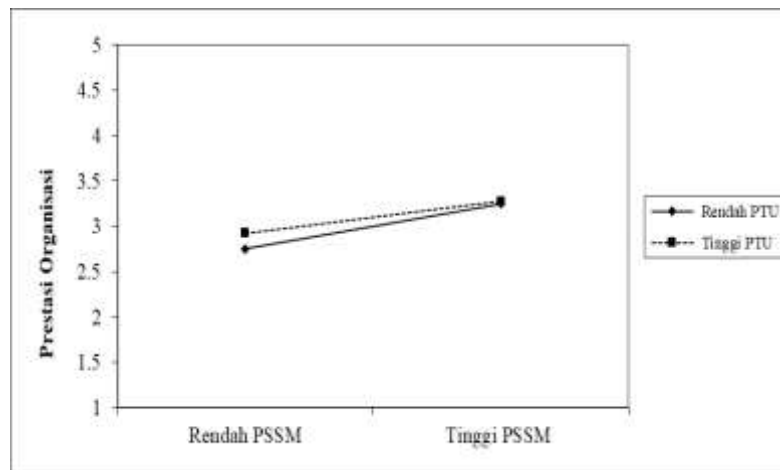


Figure 2: Moderator effect of PTU* between SHRM/PSSM and PERF/PRES/OPERF

4.6 Evaluation of Predictive Relevance with PLS Predict

Given that the present research focuses on predictive analysis, PLS-Predict was employed with the aim of assessing the model's forecasting capability (Shmueli et al., 2019). In particular, this approach evaluates the difference in error across PLS-SEM and a reference model called the Linear Model (LM). A smaller gap between the PLS and LM errors signifies robust predictive performance. Conversely, predictive relevance is not established when all PLS-LM differences are observed to be greater. Generally, most of the lower values indicate moderate predictive power, whereas only a few lower values suggest weak predictive capability. In comparison, RMSE functions as the metric in PLS-Predict, since errors are distributed in a symmetric manner, as noted by Shmueli et al. (2019). Following this, Table 6 presents the results of the PLS-Predict analysis. Notably, the model shows robust predictive capability due to the RMSE associated with PLS is smaller compared to that of LM. Additionally, Q^2 values should be positive. The analysis also indicates that a majority of items have negative values across every variable, thereby supporting the strong predictive performance of such a model (Shmueli et al., 2019). PRES is the label used for measuring OPERF items.

Table 6: PLS predict

	PLS-SEM_RMSE	LM_RMSE	PLS - LM	Q ² predict	Outcome
OPERF1	0.876	0.961	-0.085	0.328	
OPERF2	0.878	0.965	-0.087	0.327	
OPERF3	0.836	0.906	-0.07	0.288	
OPERF4	0.799	0.861	-0.062	0.358	
OPERF5	0.904	0.943	-0.039	0.285	
OPERF6	1.099	1.176	-0.077	0.247	Strong predictor
OPERF7	0.906	0.979	-0.073	0.333	
OPERF8	0.804	0.822	-0.018	0.37	
OPERF9	0.776	0.835	-0.059	0.345	

4.7 Discussion and Implications

4.7.1 Direct Effects of SHRM and PTU on Organizational Performance

The primary objective of this study was to examine the direct relationship between Strategic Human Resource Management (SHRM) and organizational performance (OPERF) ($H1$: SHRM $\rightarrow$ OPERF). The empirical results presented in Table 5 reveal a positive and statistically significant relationship ($\beta = 0.250$, $t = 4.243$, $p < 0.01$), thereby supporting $H1$. This finding demonstrates that comprehensive SHRM practices including targeted training, talent development, and employee professionalization programs significantly augment the knowledge, skills, values, and social capital of human resources. Consequently, these enhanced competencies foster higher employee satisfaction and drive overall corporate performance.

From a theoretical perspective, this positive association is strongly substantiated by the Resource-Based View (RBV), which posits that firm competitive advantage and superior performance stem from the strategic cultivation of valuable, rare, inimitable, and non-substitutable internal organizational resources. Empowering and managing human resources strategically enables firms to build distinct capabilities that drive effective operational performance. Furthermore, this outcome corroborates prior empirical literature highlighting the critical contribution of robust SHRM frameworks toward elevating organizational outcomes (Al-Khaled et al., 2020; Chineye & Ogohi, 2020; Showkat et al., 2019).

Regarding the second research objective, this study evaluated the direct impact of Governance Policy (PTU) on organizational performance ($H2$: PTU $\rightarrow$ OPERF). The statistical analysis validates this hypothesis ($\beta = 0.097$, $t = 1.711$, $p < 0.05$), confirming that PTU exerts a direct, positive influence on performance, albeit exhibiting a weak effect size ($f^2 = 0.015$). This finding indicates that structured operational management centered on rigorous halal standards and total food quality control remains a key determinant of organizational performance. This directly aligns with earlier empirical research demonstrating a strong link between corporate governance frameworks and positive financial and operational outcomes (Fauzi et al., 2020; Yusoff & Alhaji, 2024).

The relevance of PTU is conceptually grounded in Institutional Theory (IT), which underscores how institutional rules, norms, schemes, and routines shape structural organizational behavior. In the context of Malaysian halal food manufacturing, complying with recognized governance frameworks ensures regulatory alignment and maintains product integrity, which directly translates into sustained marketplace credibility.

4.7.2 The Non-Significant Moderating Role of Governance Policy (PTU)

The third hypothesis asserted that Governance Policy (PTU) moderates the relationship between SHRM and OPERF ($H3: PTU \times SHRM \rightarrow OPERF$). As reported in Table 5, the interaction term was not statistically significant ($\beta = -0.074$, $t = 1.127$, $p = 0.130$), leading to the rejection of $H3$. These findings indicate that within the current sample, PTU does not alter the strength or direction of the relationship between SHRM and organizational performance. This suggests that the capacity of SHRM to enhance operational performance remains independent of the degree of governance policy implementation among halal food manufacturing companies.

This outcome aligns with Garavan et al. (2020), who noted that organizational context factors do not uniformly function as significant moderators between human resource practices and firm performance. Consequently, PTU contributes directly to organizational performance ($H2$) rather than acting as a catalytic mechanism that modifies the impact of SHRM. This interpretation is consistent with methodological guidelines by Becker et al. (2018) and Hair et al. (2022), who emphasized that an insignificant interaction effect underscores the absence of a moderating relationship.

4.7.3 Practical and Policy Implications

To establish a resilient and highly scalable halal ecosystem, policymakers and industry stakeholders must champion specialized educational and intensive training programs focusing on halal awareness, strategic resource management, and governance refinement. Equip manufacturing professionals with these integrated competencies to help firms adapt to international regulatory expectations, minimize existing operational performance gaps, and achieve the broader strategic objectives of the Malaysian halal sector.

Furthermore, these findings emphasize the necessity of embedding halal governance and strategic HRM frameworks directly into academic curricula and professional training modules. Sensitizing food manufacturers to both strategic human resource utilization and compliance management will ensure strong regulatory adherence and industry competitiveness. Finally, this study serves as a valuable empirical reference for students, business practitioners, and policymakers, offering practical insights on leveraging independent strategic internal designs alongside external governance policies to optimize performance within the global halal industry. The findings provide important practical and policy implications by demonstrating how strategic human resource management and governance policy can be leveraged to improve organisational performance within the halal food manufacturing sector. For practitioners, the findings highlight the importance of strengthening halal competencies, developing strategic human resource capabilities, and implementing effective governance practices to enhance operational efficiency and halal compliance. For policymakers, the findings provide empirical evidence to support the refinement of existing halal policies, competency development initiatives, and regulatory frameworks through relevant institutions such as the Halal Development Corporation (HDC) and Halal Training Institute (HTI). These efforts are aligned with the objectives of the Halal Industry Master Plan 2030 (HIMP) in developing a resilient, competitive, and sustainable halal ecosystem (MITI, 2023).

5.0 CONCLUSION

This study addresses a critical gap in the management literature of the global halal industry by unlocking the mechanisms through which internal organisational strategies and external regulatory systems drive organizational performance among Malaysian halal food manufacturers. The empirical evidence demonstrates that Strategic Human Resource

Management (SHRM) and Governance Policy (PTU) act as robust, independent, and parallel drivers that positively elevate organizational performance. Conversely, the statistical rejection of the moderating hypothesis (*H3*) proves that the efficacy of internal human resource practices is not contingent upon external governance mandates. This delivers a key structural insight for the Nusantara region's market: governance policies maximize organisational capabilities through their own direct framework of enforcement and quality assurance, rather than altering the internal design of strategic human capital.

From a practical and managerial standpoint, these outcomes provide actionable recommendations for industry practitioners and policymakers navigating the competitive global halal ecosystem. Rather than treating internal HR capital and external compliance as a singular administrative burden, corporate leaders must spearhead parallel investments in both domains as separate, complementary core capabilities. Executive managers are urged to institutionalize specialized training and strategic alignment within their human resource departments. Crucially, they must recognize that fostering high-performing internal halal talents generates significant performance returns independently, irrespective of the stringent external institutional pressures or standard baseline regulatory criteria imposed by Malaysian halal authorities.

From a policy and development perspective, these findings emphasize the critical necessity for educational institutions and state agencies to deliberately embed comprehensive halal governance and strategic HRM frameworks into professional training modules and national curriculum. Cultivating high-caliber, context-specific halal executive talents is vital to bridging operational performance gaps and realizing the strategic aspirations of Malaysia's Halal Industry Master Plan (HIMP 2030).

While this research provides a strong empirical foundation within the Malaysian context, it opens several strategic avenues for future scholarly inquiry across the Nusantara archipelago. Future studies should investigate whether distinct forms of organisational culture influence the joint implementation of governance frameworks and human resource strategies. Furthermore, given the rapid push for technological adaptation, exploring how halal manufacturing firms can balance strict regulatory compliance with operational flexibility through digitalization and automated tracking systems remains an urgent agenda. Finally, applying this framework to other expanding halal sectors like pharmaceuticals, logistics, and modest fashion in various economies will help confirm if these results are consistent across different industries. This will deepen our collective knowledge of governance, strategic management, and sustainable industrial growth.

ACKNOWLEDGEMENT

This research was funded by UMT (UMT/PGRG/2020/55207) and the Postgraduate Management Centre, University Malaysia Terengganu (UMT), Malaysia.

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