Journal of Integrated Sciences
Volume 6, Issue 3, June 2026
ISSN: 2806-4801

BEYOND CONVENTIONAL MODELS: A QUANTITATIVE APPROACH TO ISLAMIC OPERATIONS MANAGEMENT

Rafikul Islam[1] & Md Siddique E Azam[2]

[1]Aliah University, Action Area IIA/27
New Town, Kolkata 700160, India
[2]Qasim Ibrahim School of Business
Villa College, Maldives

ABSTRACT

The paper aims to introduce a quantitative model of Islamic operations management and empirically test how Shariah principles - such as amanah, adl, ihsan, shura, and maslahah - are integrated into key areas like human resource management, decision-making, supply chain, and productivity. It also examines the direct effects of these dimensions on organisational performance and evaluates the model's overall explanatory power using partial least squares structural equation modelling (PLS-SEM). Data were gathered using a structured questionnaire with 5-point Likert-scale questions, which were modified based on the literature, in a cross-sectional survey study, involving 211 educated and experienced professionals. The results show a high level of agreement between the perceptions and the Islamic principles, with the human resource management making the most significant positive impact on the decision-making and productivity, decision-making positively affects the productivity, layout management positively affects both. The study has limitations such as cross-sectional nature not making it possible to make causality across time. Additionally, the use of self-reported data, which is prone to social desirability bias. Practically, the findings inform managers in the Islamic-oriented organisations to focus on the ethical HRM practices and consultative decision-making and Shariah-compliant

layouts to enhance productivity, employ lean implementations with care to fit within the values such as employee welfare, and instruct policymakers on human standards. This study is unique as it uses data to show that Islamic operations management is a highly effective ethical framework. It proves that when businesses prioritise morals and people, they actually become more productive, hence, proving that value-based management is a better way to do business.

Keywords: *Islamic Operations Management*, *Productivity*, *Shariah Principles*, *Layout Analysis*, *Halal Supply-Chain*, *Lean Management*.

Corresponding author: Rafikul Islam can be contacted at rafik683@gmail.com

1. INTRODUCTION

Operations management is a key factor for organisational effectiveness, competitiveness and sustainability. It is becoming common in the modern academic literature that operational systems do not exist in a value-neutral setting, but instead, they are part of an ethical, cultural, and institutional environment that forms a source of managerial conduct and performance outcomes (Hassi, 2019; Rehman & Askari, 2019). *Amanah* (trust), *adl* (justice), *ihsan* (excellence), *shura* (consultation), and *maslahah* (public interest) are some of the Shariah-based principles that are likely to affect managerial practices in Muslim-majority and Islamic-oriented organisations by focusing on accountability, stakeholder welfare, and moral responsibility in addition to efficiency and profitability (Beekun & Badawi, 2018; Khan et al., 2021). In this philosophy, Islamic operations management is a form of integrated paradigm of entrenching ethical and spiritual considerations in the principal operations

facets that comprise human resource management, decision making, supply chain management, and productivity.

Nevertheless, with growing theoretical concerns, there are still gaps in empirical studies on Islamic operations management. The existing literature is conceptual or qualitative, and the primary goal they pursue is not to measure causal dependencies between the operational dimensions and performance results (Hassi, 2019; Muneeza et al., 2020). The available body of empirical research tends to impose a single (functional) area (like halal logistics, Islamic human resource practices, or the ethical leadership) without providing a holistic model that describes the systemic nature of operations management in the view of Islamic perspective (Abdullah & Valentine, 2019; Khan *et al.*, 2021). Consequently, less empirical transparency is available on what operational aspects have the strongest impact on productivity, how the processes of making decisions in Islam logically influence performance, and whether contemporary efficiency-focused models of operations are consonant with the Islamic operational values in reality.

It is on this background that the current research endeavours to create an all-inclusive Islamic operations management model and test it empirically using a quantitative structured modelling framework. Specifically, the objectives of this study are to:

a. Assess the extent to which Islamic operations management principles are embedded across key operational dimensions.

b. Examine the direct effects of human resource management, general management, layout

management, lean management, and decision-making on organisational productivity; and

c. Evaluate the overall explanatory power and model adequacy of an integrated Islamic operations management model using partial least squares structural equation modelling (PLS-SEM).

This research has a number of significant implications to the body of literature. Theoretically, it contributes to the field of research on Islamic management by providing one of the first extensive quantitative certifications of Islamic operations management as a multidimensional construct. Such approach puts the field out of the normative discourse field into explanatory and predictive research. The only difference, methodologically speaking, is that it shows that using PLS-SEM is useful to model intricate ethical-operational relationships, especially where there is interaction between latent values and behavioural constructs. Practically, the findings will offer evidence-based advice to the managers citing human resources management and Islamic decision-making as the key productivity parameters, and also indicating possible tensions between lean/JIT practices and Islamic operational settings. Lastly, the paper leads to contribution of the wider management-related literature in placing the Islamic operations management as a valid ethical-performance paradigm that can be used to supplement the more recent discussions on both responsible management, sustainability, and stakeholder-oriented governance (Rehman & Askari, 2019; Hassi, 2019; Beekun & Badawi, 2018).

2. REVIEW OF LITERATURE

To instil trust, social good and sustainable performance, Islamic operations management incorporates *Maqasid-al-Shariah*, halal integrity, and ethical excellence in the processes and operationalizes compliance through tools such as ERP and halal logistics. Practical issues are the coordination of stakeholders, integration of the system and modifying western models. The Islamic operations management has religious and ethical grounds on which its goals, measures and practices acceptable, are based. Among the important principles are legal (*halal*) procedures, the search of the *Maslahah* (public good) in the *Maqasid al-Shariah*, ethical workmanship (*ihsan* and *itqan*), the elements of transparency and social responsibility. Table 1 presents the core principles of Islamic operations management, and their implications investigated by past studies.

Table 1. Core principles of Islamic operations management and their implications

Principle	Practical application	Common challenges	Primary benefits
Shariah compliance	Use of Shariah rules as rules for logistics and handling to preserve halal status (Gunardi, 2023).	Aligning multi-actor processes across the chain (Anggara *et al.*, 2024).	Greater consumer trust in halal claims (Gunardi, 2023; Rohaeni & Sutawijaya; 2020)
Halal integrity	End-to-end controls and traceability across procurement, production and distribution, often via ERP integration (Talib *et al.*, 2025)	Technical and organisational integration of systems (Talib *et al.*, 2025)	Traceability and demonstrated compliance for markets (Talib *et al.*, 2025)

Maqasid and Maslahah	Using SCM to promote social, economic and environmental welfare in decisions (Elzoubi *et al.*, 2021)	Measuring socio-environmental outcomes alongside profit (Anwar *et al.*, 2024)	Balanced sustainable performance beyond profit (Elzoubi *et al.*, 2021; Anwar *et al.*, 2024)
Ethical workmanship *ihsān itqān*	Embedding culture of excellence, worker welfare and moral conduct into quality systems (Harun *et al.*, 2017; Aziz *et al.* 2014).	Adapting Western technical quality models into Islamic frameworks (Harun *et al.*, 2017).	More holistic quality and improved organisational integrity (Aziz *et al.*, 2014)
Transparency and certification	Halal certification, stakeholder roles, and public information to support halal supply chains (Rohaeni & Sutawijaya, 2020; Talib *et al.*, 2025)	Low awareness and certification uptake among MSMEs (Rohaeni & Sutawijaya, 2020)	Market access and consumer confidence (Rohaeni & Sutawijaya, 2020)

Note: The author(s) own work.

2.1 Human Resource Management (HRM)

The quality and productivity of decisions and the way work is done are highly affected by the HRM in terms of decision making and the performance of duties by personnel. Some Islamic teachings bring together the ethical and spiritual aspects, where HRM is conducted in line with Islamic beliefs of justice, the welfare of the employees and treating them as *amanah* (trust). In theory, the effects may be consistent with the ability-motivation-opportunity (AMO) model, which creates an alternative of performance-based investments created through employee ability and motivation (Liao & Han, 2019). Multi-

informant data available, which has been spread across various manufacturing plants indicated that lean production positively affects performance, but only when deepened by powerful ability and motivation-oriented HRM, but otherwise, it could have negative impact (Liao & Han, 2019). Research indicates that Islamic HRM practices such as fair selection, training, appraisal, and rewards based on Islamic ethics have positive correlations with organisational performance introduced by other motivators such as organisational commitment and trust in Islamic contexts (Abdul Ghani Azmi, 2015; Dhar *et al.*, 2018). As an example, Islamic HRM enhances employee motivation based on the principles of *ihsan* (excellence) and justice, which results into better skills, discretionary effort, sharing information, frontline problem-solving and incentive congruence that increase the accuracy and timeliness of decisions and ultimate productivity (Liao & Han, 2019; Khan & Khan, 2010). In practice, managers must focus on specific recruitment, training, performance assessment, and reward systems in accordance with the Islamic values and process modifications to achieve productivity improvement and must not be guided only by technical solutions (Liao & Han, 2019; Abdul Ghani Azmi, 2015).

2.2 General Management

General management practices define organisational decisions structures and amalgamate productivity by methods of routines, metrics and talent regimes that structure decisions at different levels. In the Islamic approach, the general management focuses on the *Maqasid al-Shariah* (objectives of Islamic law) whereby an ethical leadership and stakeholder welfare are considered along with sustainability (Ibrahim &

Markom, 2024). Empirical research, and especially the use of the World Management Survey (WMS) model, has shown that companies that score higher on structured management practices (including lean manufacturing (operations management), talent management (people management), and performance management (target setting and monitoring)) show better financial and operational results (Bloom & Van Reenen, 2007; Bloom *et al.*, 2016). These practices are rated highly and positively related with increased productivity of the firm, profitability, return on capital employed (ROCE), sales growth, market value (e.g., Tobins Q) and survival rates despite the fact that other factors such as industry, country, firm size, capital intensity, and skill level have been controlled (Bloom & Van Reenen, 2007; Bender *et al.*, 2016; Scur *et al.*, 2021). Unity of command, direction and ethical governance are Islamic management principles that help to enhance improved information systems, clearer targets, incentives allocation, talent allocation, delegation and control thereby enhancing quickness and quality in strategic and operational decisions (Toor, 2007). Mechanisms boost the institutional performance by promotion of moral accountability and holism in decision-making. This means to practitioners that management practices should be measured against the Islamic standard, that practitioners should invest in the tools of managing performance and capability, and that improvement should be translated into productivity of firms by means of structured interventions (e.g. ethical metrics and talent pipelines).

2.3 Layout Management

Layout management influences operation decisions and overall performance through influencing material movements, visibility

and patterns of interaction within the shop floor. Layout choices in Islamic operations should promote the precepts of the halal (e.g. avoiding contamination in halal facilities) and ergonomic choices that conform to the human dignity and welfare. The example of a case study in a postal sorting hub conducted using the principles of graph theory also used lean principles to analyze layouts and showed that the approach facilitates better insights into optimal decision-making and operational indicators, such as throughput and service growth (Vadivel *et al.*, 2024). Theoretical learning from lean principles and ergonomics indicates that well-designed facility layouts reduce cognitive and coordination costs for workers and supervisors, thereby enhancing local decision-making processes—such as routing, sequencing, and resource allocation—through improved material flow and information visibility (Botti *et al.*, 2017; Afonso *et al.*, 2021). Empirical applications, particularly using digraph and matrix models within graph theory frameworks, demonstrate measurable effectiveness in selecting optimal layouts that inform decision criteria and improve operational performance (Vadivel *et al.*, 2024). Organisations should use formal evaluation methods (such as graph theory, lean principles, and ergonomics assessments), involve cross-functional stakeholders to understand decision impacts, and regularly update layouts as demand or product mixes change. In halal-sensitive contexts, these practices must be applied without violating Shariah requirements to ensure both high decision quality and sustained productivity.

2.4 Lean Management

The lean management entrenches the elimination of waste, standardization of work and continuous problem solving in its activities. The lean principles are more or less the same in terms of efficiency, waste elimination (*israf*), and the need to continuously get better (*itqan*), whereas in an Islamic perspective, it has to be implemented in accordance with the ethical and the halal standards (Manaf & Zein, 2011). Study shows that lean management is only positively related to performance with the support of highly exercised HRM, otherwise it can lead to poor performance (Liao & Han, 2019). Elements of lean (philosophy, processes, people, problem-solving) have a positive impact on efficiency and effectiveness, and the mediating roles of rewards on the operational performance are present in the context of the public organisation (Vadivel *et al.*, 2024). Such mechanisms as identifying problems more clearly, making faster decisions through standardization, and continuous learning to improve routine and non-routine choices are the ways to increase throughput and quality (Vadivel *et al.*, 2024; Liao & Han, 2019). In practice, it is prudent to implement lean as a socio-technical bundle, consisting of codified philosophy, problem solving, aligning incentives ethically, and conveying performance, which would be compatible with Islamic values regarding decision-making and productivity gains (Liao *et al.*, 2019; Vadivel *et al.*, 2024; Manaf & Zein, 2011).

2.5 Supply Chain

Islamic principles can be used in supply chain related procurement, logistics, warehousing, and distribution. Halal supply chain management (HSCM) can apply the *Shariah* rules on all levels using integration tools to assure halal integrity and relying on multi-stakeholder governance in order to ensure proper control. *Shariah* is used as a reference point, which regulates acceptable inputs and processes to protect the halal status during sourcing and transportation (Gunardi, 2023). Integrated information flows and controls in the farm-to-plate are used to implement end-to-end integrity that might include modules of sales and distribution based on enterprise resource planning (ERP) systems (Talib *et al.*, 2025). In addition, in accordance with *Maqasid al-Shariah*, supply chain practices, including resources, information, integration, and relationships, are to be oriented towards the *Shariah* objectives in order to foster sustainability and attain sustainable results (Elzoubi *et al.*, 2021).

Practically, traceability systems and ERP modules help track material source, processing and distribution records (Talib *et al.*, 2025), and halal logistics practices focus on separated handling, contamination control, better compliant warehousing to prevent cross-contamination (Gunardi, 2023; Kasim *et al.*, 2022). Stakeholder governance models entail the efforts of the industry, government, academia, and supporting infrastructure to establish halal chain frameworks (Anggara *et al.*, 2024). The major challenges include difficulties with operational coordination between various actors and jurisdictions and halal assurance being a challenge to achieve universally (Anggara *et al.*, 2024). The integration process is both expensive and

difficult due to the complexity of the system when deploying ERP and traceability solutions (especially to small and medium enterprises or SMEs) (Talib *et al.*, 2025; Rohaeni & Sutawijaya, 2020), and differences in standardization and enforcement by region (Gunardi, 2023). Irrespective of these issues, HSCM brings about advantages like boosted market trust and differentiation of halal producers and exporters (Gunardi, 2023; Talib *et al.*, 2025), sustainable increase in performance when aligned with social, economic, and environmental objectives (Elzoubi *et al.*, 2021; Anwar *et al.*, 2024), and safeguarding the interests of the public through the spread of the *Maslahah*-style authenticity prevention and consumer protection (Kasim *et al.*, 2022).

2.6 Quality Management

In quality management, the Islamic view goes beyond technical controls to incorporate the aim of morality and spirituality with regard to work being considered as an act of worship and quality as an ethical commitment based on excellence (*itqan*) and perfection (*ihsan*) in making decisions, and the welfare of workers and the inclusion of the spiritual goal with traditional quality management. Work as worship propels quality management to the satisfaction of customers and also obeying God with *ihsan* in all activities (Harun *et al.*, 2017). *Itqan* culture leads to the constant improvement based on moral responsibility and organisational ethics (Aziz *et al.*, 2014), and modified quality models are involved with welfare, integrity, and social responsibility in addition to technical measures (Harun *et al.*, 2017; Aziz *et al.*, 2014). In practice, the Islamic standards of quality incorporate ethical standards such as fair treatment and honesty into the quality management systems

instead of simply adapting the models of the West (Harun *et al.*, 2017) and incorporates human-based measurements that value the welfare of the workers and their impact on the community (Aziz *et al.*, 2014). Some of the challenges include the low transferability of Western total quality management (TQM) models, which usually neglect religious and social aspects and must be adapted in the specific context (Harun *et al.*, 2017), and the difficulty of the translation of the spiritual objectives into quantifiable key performance indicators (KPIs) and audit processes (Harun *et al.*, 2017). These pros are high-quality performance that has brought together technical quality with ethical legitimacy that will result in greater stakeholder confidence (Aziz *et al.*, 2014), as well as a better internal cohesion as ethical norms strengthen accountability and constant enhancement (Aziz *et al.*, 2014).

2.7 Resource Utilisation

To manage the utilisation of the resources, Islamic operations management involves the management of inventory and production planning to maintain the spirit of halal, ethical use of resources, avoid cross-contamination and guarantee the legality of inputs. The principles of inventory management focus on halal safe storage and segregation to prevent contamination and maintain halal conditions in warehousing and terminals (Gunardi, 2023; Kasim *et al.*, 2022), with enabled traceable inventory records through ERP systems to track the material status between procurement and sale (Talib *et al.*, 2025). End-to-end integrity in production management requires halal-compliant inputs, processing, and scheduling of all manufacturing processes (Talib *et al.*, 2025), whereas in *Maqasid al-shariah*, informed production management considers societal

good and resource management in production (Elzoubi *et al.*, 2021). The issues related to this are the burden of implementation on the SMEs to receive upgraded systems and processes to enable segregation and traceability (Talib *et al.*, 2025; Rohaeni & Sutawijaya, 2020). The advantages include a lower risk of contamination and enhanced compliance regarding inventory and production controls are adjusted to the halal logistics practice (Gunardi, 2023; Talib *et al.*, 2025). Additionally, a greater level of operational transparency and market accessibility in case of production is demonstrated as of integrity and certification preparedness (Talib *et al.*, 2025; Rohaeni and Sutawijaya, 2020).

2.8 Operations Strategy

In service and strategic operations, Islamic values look at achieving *Maqasid al-shariah*, such strategies consider the welfare of the stakeholders, and its ethical legitimacy, whereby, strategic decisions are determined to balance the financial, social, or environmental goals and achieve trust, transparency, and humane customer relations in service delivery. Maqasid orientation prioritizes strategy towards policies that produce social benefit and sustainable development instead of the short-term profit maximization (Elzoubi *et al.*, 2021; Anwar *et al.*, 2024). Hence, ethical standards are internalized into the strategic planning steps, including making halal infrastructure and halal-certified and halal-compliant IT system investments, the way to have long-term social licence (Anggara *et al.*, 2024; Rohaeni & Sutawijaya, 2020). Trust and assurance are at the centre of service operations and customer relations since halal logistics and transparent certification increase consumer confidence in products and services (Gunardi, 2023; Rohaeni

and Sutawijaya, 2020). Simultaneously, customer-centred integrity consolidates service quality with appropriate ethical behavior and honest communication (Harun *et al.*, 2017; Aziz *et al.*, 2014). Some challenges such as strategic tradeoffs between short-term cost efficiency and long-term social/environmental results, governance structures to implement *shariah* compliant, and awareness/capacity development among SMEs to adopt strategic halal and service improvements (Rohaeni & Sutawijaya, 2020) are also present. Some of the advantages include improved sustainability and positioning of the market when the strategy integrates halal integrity and social value, generating wider benefits in performance (Elzoubi *et al.*, 2021; Anwar *et al.*, 2024), increased customer loyalty and competitive advantage through ethical service delivery and certifiable halal assurance system (Gunardi, 2023; Talib *et al.*, 2025).

3. RESEARCH METHODOLOGY

The research approach carried out in the study is a quantitative, cross-sectional study in order to empirically investigate the correlation between Islamic operations management practices and the productivity of organisations. The survey-based method was used because it is appropriate to address the perceptual data of a large sample and test theoretically based structural relationships among latent constructs (Hair et al., 2019). The study relies on Partial Least Squares Structural Equation Modelling (PLS-SEM) as the main method of analysis, as it is applicable to developing theories, complex models that incorporate numerous latent variables, and non-normal data distribution (Sarstedt *et al.*, 2017; Hair *et al.*, 2022).

A logical and well-conducted review of the previous literature on Islamic management, operations management, and organisational productivity made the development of a structured self-administered questionnaire as the research tool to collect data. The tool was divided into two large parts. Section A included demographic and professional characteristics of the respondents, such as gender, age, level of education, working experience, employment and position in the organisation. Section B included the constructs of the Islamic operations management that are measured with the help of a number of reflective indicators using 5-point Likert scale, where 1 (strongly disagree) and 5 (strongly agree) were the extremes. The operational dimensions were Operations Strategy, Quality Management, Resource Utilisation, Supply Chain Management, Human Resource Management, General Management, Layout Management, Lean/Just-in-Time Management, and Decision Making, the endogenous outcome variable was Productivity. To ensure the validity of content and the contextualism of the results, all the measurement items were converted to the existing conceptualizations within Islamic management and operations literature and refined to represent the Islamic ethical setting (Beekun & Badawi, 2018; Hassi, 2019; Khan *et al.*, 2021).

There were 211 valid responses collected and analysed later. The sample size was larger than the minimum required standards of PLS-SEM, meeting the "10-times rule" and stricter standards of statistical power of structural modelling (Hair *et al.*, 2019; Kock & Hadaya, 2018). It was demonstrated in the demographic profile that the sample used was well-educated and professional with a high level of representation among the lecturers, managers and working professionals, which increased

the semblance and applicability of the results in the field of operations management. Hence, the sample size was considered to be sufficient in estimating the model parameters and hypothesis of testing relationships.

Before testing the hypothesis, the measurement model was tested to determine the reliability and validity based on the developed PLS-SEM methods. Cronbachs alpha and composite reliability were used to evaluate internal consistency, and they were found to be above the recommended 0.70 level of all the constructs, satisfying the acceptable level of reliability (Hair *et al.*, 2022). Average variance extracted (AVE) was considered as a measure of convergent validity and the AVEs of each of the constructs were all above 0.50 indicating that the indicators used to measure the latent variables were deemed sufficient to explain them. Outer loading was also used to support the indicator reliability where most of them were above 0.70 with few of them within the acceptable range of 0.60 to 0.70. All these findings affirm that these measurement model had strong psychometric properties.

The structural model was then tested in order to test the hypothesised relationships. The estimation of path coefficients was based on a bootstrapping process with 5,000 resamples that allowed conducting significant tests (often) on direct effects (Hair *et al.*, 2019). The study used coefficient of determination (R^2) to measure the explanatory power of the model (Chin, 2010; Hair *et al.*, 2022). Simultaneously, the model fit was tested on the basis of Standardized Root Mean Square Residual (SRMR) and Normed Fit Index (NFI) (Henseler *et al.*, 2016).

Lastly, PLS-SEM is theoretically and methodologically considering the complexity of the model and the exploratory character of the research in the field of Islamic operations management. The PLS-SEM allows estimating two or more interrelated dependence relationships at once and allows estimating latent constructs that are hard to measure with the help of traditional regression-based methods (Sarstedt *et al.*, 2017; Hair *et al.*, 2022). The integration of several core operational dimensions into one structural framework enables this methodological approach to conduct a holistic evaluation of the role of the Islamic operational practices in decision-making processes and productivity in the ultimate result, hence offering a solid empirical base in the efforts of developing the Islamic management model.

4. FINDINGS

4.1 Background of the Respondents

The demographic statistics (Table 2) of the respondents show that the survey was conducted among a fairly well-educated and experienced professional sample of 211. There is a male dominant gender representation with a proportion of 61.6 and 38.4 percent female respondents. On the age aspect, the majority of them are in the younger and mid-career category implying a workforce which is actively experienced in organisational and managerial practices. The educational background is highly educated, with a ratio of 28.4% Bachelors, 27.5% Master, and 28.9% PhD. In terms of experience, there is a high percentage of those of over 10 years of experience (39.8%), under 5 years (36.0) and 5 to 10 years (19.9) experience representing the experienced and young

professionals. Type of employment demonstrates that the respondents are mostly in the private industry (42.2) and in the public industry (33.2). In general, the sample could be described as the one composed of educated and experienced professionals, and it is appropriate to achieve the objectives of the current study.

Table 2. Background of the respondents

Profile		Frequency	Percentage
Gender			
	Female	81	38.4
	Male	130	61.6
Age			
	21 - 30 years	82	38.9
	31 - 40 years	61	28.9
	41 - 50 years	36	17.1
	Above 50 years	32	15.2
Education			
	Bachelors	60	28.4
	Diploma	5	2.4
	Masters	58	27.5
	PhD	61	28.9
	Professional degree	22	10.4
	SPM/O Level	2	.9
	SPTM/ A Level	3	1.4
Experience			
	5 - 10 years	42	19.9
	Less than 5 years	76	36.0
	More than 10 years	84	39.8
	No Experience	9	4.3
Employment Type			
	Private sector	89	42.2
	Public sector	70	33.2
	Retired	3	1.4
	Self-employed	26	12.3
	Unemployed	23	10.9

Note: The author(s) own work.

Furthermore, Figure 1 showing the distribution of respondents in terms of position suggests a diverse profile consisting of mostly people with academic and student background. Most of the participants belong to the student non-worker group

(27.5% n= 58) and lecturers (20.4% n=43) implying a good representation of the education sector. Simultaneously, executive and managerial officers comprised 16.1 percent (n = 34) of the sample, a significant number of practitioners holding decision-making positions. Also, there is a significant proportion of working students as managers/ executive officers (6.6%, n = 14), lecturers (6.2% n = 13), and entrepreneurs (4.3% n = 9). Generally, the sample incorporates both academics and the real managerial fields, and this fact reinforces the meaningfulness and applicability of the results to the Islamic operations management.

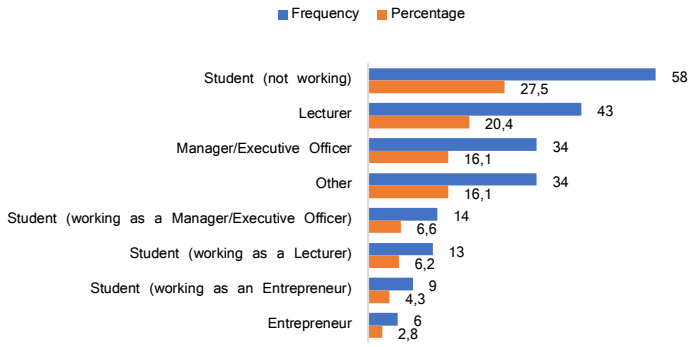

Figure 1. Professional background of respondents

4.2 Descriptive Statistics

According to the descriptive statistics (Table 3), the mean of all the latent constructs is high, ranging between 4.5365 and 4.7238 on a five-points Likert scale. This result implies that, overall, the respondents are highly consistent with their perceptions of the relevance and use of Islamic operations

management principles. The highest mean (M = 4.7238) is recorded in Human Resource Management (HRM), then continues with Decision Making (DM) (M = 4.7175) meaning that the respondents chose to emphasise the Islamic values especially in people management and decision-making processes. The mean (M = 4.5365) and standard deviation (SD = 0.59036) of productivity are the lowest which suggests that variability in perceptions of productivity is relatively high as opposed to other constructs. However, the overall high mean scores of all dimensions, including Operations Strategy, Quality Management, Resource Utilisation, Supply Chain Management, and General Management, demonstrate a fairly positive image and high approval of Islamic concepts of operational procedures.

Table 3. Overall mean and standard deviation

	Variables	N	Mean	Std. Deviation
A.	Operations Strategy (OS)	211	4.6521	.47573
B.	Quality Management (QM)	211	4.6246	.50385
C.	Resource Utilisation (RU)	211	4.6531	.50731
D.	Supply Chain Management (SCM)	211	4.6392	.52958
E.	Human Resource Management (HRM)	211	4.7238	.49321
F.	Productivity	211	4.5365	.59036
G.	General Management (GM)	211	4.6836	.51931
H.	Layout Management (LM)	211	4.6809	.52459
I.	Lean Management (JIT)	211	4.5687	.54301
J.	Decision Making (DM)	211	4.7175	.50730

Note: The author(s) own work.

4.3 Measurement Model: Outer Loadings

Outer loading values, as presented in Table 4, are indicative of high item indicator reliability. Most of the loading of the items exceeded the recommended 0.70 item loading whereas a good number was above 0.80. Although a few were in the range of

0.65-0.70, this was quite acceptable in PLS SEM since the composite reliability and AVE values were high. This confirmed that the indicators observed were sufficient to measure the latent constructs.

Table 4. Factor loadings

	OS	QM	RU	SCM	HRM	Productivity	DM	GM	LM	JIT
B1	0.772									
B10	0.657									
B2	0.750									
B3	0.836									
B4	0.770									
B5	0.756									
B6	0.808									
B7	0.817									
B9	0.768									
C1		0.802								
C2		0.840								
C4		0.822								
C5		0.663								
D1			0.789							
D2			0.805							
D3			0.853							
D4			0.849							
D5			0.824							
E2				0.729						
E3				0.846						
E4				0.794						
E5				0.798						

E6	0.720						
E7	0.839						
E8	0.832						
F1		0.826					
F2		0.812					
F3		0.861					
F4		0.831					
F5		0.868					
F6		0.792					
F7		0.828					
G1			0.815				
G2			0.865				
G4			0.847				
G5			0.869				
H1				0.776			
H2				0.832			
H3				0.873			
H4				0.808			
H5				0.887			
H6				0.771			
H7				0.900			
H8				0.800			
I1					0.822		
I2					0.834		
I3					0.811		
I4					0.728		
I5					0.831		
I6					0.694		

J1	0.793	
J2	0.808	
J3	0.786	
J4	0.712	
J5	0.819	
J6	0.828	
K1		0.855
K2		0.841
K3		0.868
K4		0.789
K5		0.837

Legend: OS = Operations Strategy, QM = Quality Management, RU = Resource Utilisation, SCM = Supply-Chain Management, HRM = Human Resource Management, DM = Decision-Making, GM = General Management, LM = Layout Management, JIT = Lean Management.

4.4 Reliability and Validity Statistics

The reliability and validity tests (Table 5) show that the measurement model has high psychometric characteristics according to the standards of PLS-SEM. All the constructs had a Cronbach alpha of 0.789 to 0.936 which was above the suggested alpha of 0.70 indicating good to excellent internal consistency. The value of composite reliability (CR) was also high (between 0.864 and 0.947) and supported the reliability of the constructs. Regarding convergent validity, all the Average Variance Extracted (AVE) values were beyond the minimum requirement of 0.50. Taken together, these findings reveal that the measurement model is strong, has strong reliability and validity, and appropriate to be under structural analysis.

Table 5. Reliability and validity statistics

	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
DM	0.936	0.947	0.693
GM	0.877	0.907	0.622
HRM	0.926	0.94	0.692
JIT	0.894	0.922	0.703
LM	0.881	0.91	0.627
OS	0.914	0.93	0.596
Productivity	0.871	0.912	0.721
QM	0.789	0.864	0.616
RU	0.882	0.914	0.68
SCM	0.903	0.923	0.633

Note: The author(s) own work.

4.5 Structural Model: Path Analysis

The path analysis resulted in several important relationships as presented in Table 6 and shown in Figure 2. The positive impact of HRM on Decision Making ($b = 0.529$, $p < 0.001$) is the most significant and therefore makes HRM a core element in situations where Islamic operations are being performed. Productivity is, in its turn, affected by Decision Making significantly ($b = 0.345$, $p = 0.002$). HRM has also a positive impact on Productivity ($b = 0.260$, $p = 0.007$) which is direct as well as significant. Simultaneously, Layout Management showed significant direct impact on both Decision Making ($b = 0.211$, $p = 0.001$) and Productivity ($b = 0.221$, $p = 0.002$). Additionally, GM had a significant influence on the Decision Making ($b = 0.254$, $p = 0.001$) but no direct impact on Productivity. Interestingly, Lean Management/JIT was found to have negative impact ($b = -0.173$, $p = 0.028$) on Productivity.

These findings indicate possible implementation or setting operational issues in the Islamic operational context. Operations Strategy, Quality Management, Resource Utilisation and Supply Chain Management are other constructs with no significant direct impacts on Productivity.

Table 6. Path analysis output

	Original Sample (O)	Sample Mean (M)	Std. Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
	0.345	0.338	0.11	3.15	0.002
DM -> Productivity	0.254	0.254	0.074	3.44	0.001
GM -> DM	0.02	0.022	0.075	0.263	0.793
GM -> Productivity	0.529	0.528	0.069	7.667	0.000
HRM -> DM	0.26	0.244	0.096	2.697	0.007
HRM -> Productivity	-0.173	-0.157	0.079	2.196	0.028
JIT -> Productivity	0.211	0.213	0.064	3.316	0.001
Layout_mgt -> DM	0.221	0.211	0.071	3.1	0.002
Layout_mgt -> Productivity	-0.007	-0.005	0.097	0.071	0.943
OS -> Productivity	0.042	0.044	0.091	0.458	0.647
QM -> Productivity	0.141	0.14	0.095	1.487	0.137
Res_Uti -> Productivity	0.121	0.134	0.096	1.257	0.209
SCM -> Productivity					

Note: The author(s) own work.

Journal of Integrated Sciences
Volume 6, Issue 3, June 2026
ISSN: 2806-4801

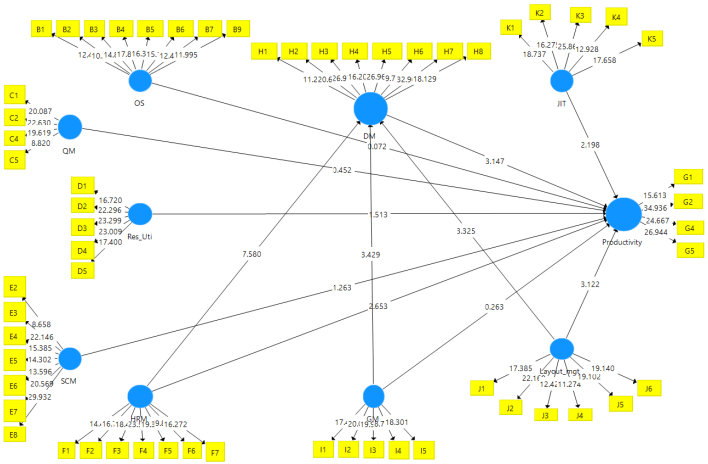

Figure 2. SEM Analysis showing T-statistics

4.6 Model Fit

The model fit indices (Table 7) show that the data fits well for the proposed structural model. Both the saturated and the estimated model have a Standardized Root Mean Square Residual (SRMR) of 0.065 which is less than the standard value of 0.08 and considered as good model fit. Further, the Normed Fit Index (NFI) value is 0.906, which is greater than the minimum of 0.90 indicating adequate to good fit. Furthermore, the explanatory power of the structural model is very strong as the R^2 of Productivity and Decision Making (DM) were found to be 0.809 and 0.836 respectively. This implies that more than 80 percent of the variation in the two constructs is explained by the structural model. All of these fit indices indicate that the given model would be regarded as statistically well-grounded and properly representing the existing relationship between the constructs as applied to the Islamic operations management.

Table 7. Model statistics

	Saturated Model	Estimated Model
SRMR	0.065	0.065
NFI	0.906	0.906
	R Square	R Square Adjusted
Productivity	0.809	0.801
Decision Making (DM)	0.836	0.834

Note: The author(s) own work.

5. DISCUSSION

The main objective of the study was to empirically investigate the impact of major dimensions of Islamic operations management to productivity in an integrated quantitative model. All in all, it can be stated that the results of the findings are highly empirical in showing the relevance of the Islamic operational principles especially in the context of human resource management, decision-making, and layout management. The fact that the proposed model showed high explanatory power (R^2 = 0.809 to productivity) implies that the nature of the Islamic operations management is a strong and theoretically relevant construct to explain productivity for an organisation that intend to comply with Islamic principles.

Among the most vivid conclusions of the present study, one should note that the central role of HRM became the strongest predictor of decision-making as well as productivity. The positive magnitude of the impact that HRM has on productivity is in line with previous researches that underline the role of Islamic HRM practices, including fairness (*adl*), trust (*amanah*), ethical leadership, employee well-being, and moral accountability as the direct contributors of employee motivation, organisational commitment, and performance

(Hassi, 2019; Khan *et al.*, 2021; Rehman and Askari, 2019). This observation validates the case that in the system of Islamic management, technical efficiency is not the likely motivational factor of productivity but the ethical and relationship nature of human capital is. Ali & Al-Owaihan (2018) and Aboramadan *et al.* (2020) also reported similar findings, discovering that the incorporation of Islamic ethical values in HR practices leads to a significant improvement of workforce participation and performance within the organisation.

The impact of Decision Making (DM) on the productivity, as well, revealed a significant positive effect, justifying the significance of *shura* (consultative decision-making) as a performance-enhancing tool. This finding is consistent with the existing empirical data that indicates that participatory, transparent, and ethically sound decision-making procedures lead to the development of trust, decrease in conflict, and operational effectiveness (Hassi, 2019; Abuznaid & Faleh, 2020). The concept of decision-making in an Islamic organisation is not simply an administrative task of managerial work but a moral matter in the form of general responsibility to stakeholders and God. The current results, hence, empirically confirm theoretical assertions long held in the Islamic management literature stating that *shura* is an organisational performance booster by fostering legitimacy, organisational inclusivity, and employee psychological ownership (Beekun & Badawi, 2018; Khan *et al.*, 2021).

The positive influence of Layout Management on decision-making and productivity was also significant, and it emphasises the operational places of physical and spatial design in the context of Islamic organisations. The finding echoes past

studies in operations and service management that state that layout design drives workflow effectiveness, hygiene, interaction among employees, and service quality (Heragu, 2016; Slack *et al.*, 2022). Islamically, layout management is not only focused on functional efficiency, but also on religious and ethical aspects, including the ability to provide prayer facilities, keep things clean (*taharah*) as well as segregate halal and non-halal operations. The result of the positive correlation in this study confirms the recent claims of Zailani *et al.* (2019) and Tieman (2017), which argue that Shariah-compliant infrastructure not only makes operations more efficient but also improves employee well-being, which is an ingredient of productivity.

Conversely, a number of more traditional dimensions of operations that might be considered dominant in the past, i.e., Operations Strategy, Quality Management, Resource Utilisation and Supply Chain Management did not impose statistically significant direct impact on productivity. The result contradicts the literature in mainstream operations management, where all demonstrates a positive correlation between these dimensions and performance outcomes (Flynn et al., 2010; Slack *et al.*, 2022). Nevertheless, in the Islamic management scenario, such an outcome can be a pointer that technical or structural practices do not suffice to spur productivity without being incorporated in systems that are ethical, people-cantered and value-based. The same has been observed by Hassi (2019) and Rehman and Askari (2019), who found that the achievement of Islamic organisational performance is mainly determined by moral control and human relations, instead of tools to enhance efficiency in mechanism.

Theoretically, interesting result was the negative correlation between the Lean /JIT practices and the productivity. This finding disagrees with large literature that represents lean systems as performance universal (Womack & Jones, 2003; Shah & Ward, 2007). Nonetheless, according to recent empirical research, an increasing number of studies find lean implementation to have both positive and negative effects in the context with great uncertainty, culture-misfit, or human unpreparedness (Bortolotti *et al.*, 2015; Netland & Ferdows, 2016). The observed negative influence in an Islamic work setting can be a result of conflicts between cost-minimisation reasoning of lean and Islamic ethical values that include employee well-being, risk sharing, moderation (*wasatiyyah*) and social responsibility. The interpretation is consistent with the conclusions of Hassi (2019) and Aboramadan *et al.* (2020), who warn against the unquestioning application of Western efficiency in the context of the Islamic values and institutional norms.

Taken together, the outcomes indicate that soft, ethical, and relationship mechanisms are the primary sources of productivity in Islamic operations management and not technical or structural systems. The main productivity engine seems to be human resource practices, ethical decision-making and supportive organisation layouts. The secondary or indirect role is taken by the traditional tools of operations. This solidifies a developing literature supporting the Islamic management as a specific value-based paradigm that focuses on moral governance, stakeholder welfare, and spiritual responsibility besides the economic performance (Beekun & Badawi, 2018; Rehman & Askari, 2019; Khan *et al.*, 2021). The study is thus

contributing to theory providing empirical evidence to the fact that the concept of Islamic operations management cannot be sufficiently explained with the use of traditional productivity models but needs a radically different analytical framework based on ethics, human capital, and institutional values.

6. CONCLUSION

This study was conducted with the aim of determining the impact of Islamic operations management in the determination of organisational productivity using a comprehensive quantitative framework. The results, based upon the data of 211 respondents and PLS-SEM analysis, are significant evidence that the Islamic operations management is a powerful and meaningful paradigm of applying the concept of productivity in the context of Islamic-based organisations. In particular, the findings indicate that the human resource management, ethical decision-making, and layout management have a strong positive impact on the productivity whereas lean and just-in-time practices have a negative correlation. Conversely, the traditional operational dimensions like operations strategy, quality management, resource utilization and supply chain management do not have significant direct impact on productivity. Altogether, these results indicate that productivity in the Islamic organisations is more motivated by the ethical, human and institutional factors based on the Islamic values, rather than the technical efficiency mechanism.

6.1 Theoretical Contribution

Theoretically, there are some significant contributions of this study to the literature. First, it promotes Islamic management theory because it presents one of the few large-scale empirical validations of the Islamic operations in management as a multidimensional construct. Although previous studies have mainly kept conceptual or normative, this paper presents quantitative results of the fact that Islamic operational principles have specific and quantifiable performance implications. Second, the findings disprove key beliefs in existence in mainstream theory of operations management by showing that the traditional drivers of productivity may not always be applicable in the Islamic organisation set ups. Third, the primary importance of human resource management and ethical decision-making promotes emergent theoretic arguments that Islamic management doesn't just rely on monitoring control systems, but also on moral governance and relationship systems. This makes Islamic operations management theoretically unique and not the simple duplicate of traditional management frameworks.

6.2 Practical Contribution

The practical aspect of this study is also quite important. To managers and organisational leaders of the institutions that adhere to Islamic principles, the results highlight the relevance of putting more emphasis on the ethical human resource activities, participatory decision making and favourable organisational condition as fundamental productivity initiatives. Employee welfare, fairness, trust and consultative leadership are some of the investments that have more likely to produce

performance results as compared to sole concentration on technical process optimisation. The layout management also has a positive part which emphasises operationality of availing Shariah-compliant physical facilities, including prayer halls, clean environment and halal-compliant segregation of processes. The lean tools might have to be restructured to be in line with Islamic philosophy that emphasises moderation, social responsibility, and employee welfare instead of taking it in its traditional approach of saving costs. The findings also offer empirical evidence to the policymaking bodies and the standard setting bodies to come up with the Islamic operations management principles that focus on ethical leadership and human based productivity.

6.3 Limitations

This study has a number of limitations. First, cross sectional research design does not give the possibility of drawing conclusions about causal relationships across time. Longitudinal designs could be used in future studies that will help to study the dynamism of Islamic operations practices and productivity. Second, the research uses self-reported data which is prone to social desirability bias especially as the constructs are ethically and religiously inclined. The multi-source data or the inclusion of objective performance indicators in the future research might have been more powerful. Finally, the study is focused to investigate direct effects, but do not consider any possible moderating or mediating processes outside of decision-making.

6.4 Recommendations for Future Research

Considering the limitations, several recommendations with regard to future research directions are made. Further research effort is needed to apply this model to other national and cultural backgrounds, such as non-Muslim majority settings or multinational organisations, in order to see how the observed relationships can be applied. It is also possible that researchers consider sector-specific Islamic operations management, especially in the manufacturing sector, healthcare, halal logistics and financial services. In addition, other mechanisms that ought to be addressed in future work include ethical leadership, organisational culture, spiritual intelligence and digital transformation which have the potential of mediating and moderating productivity. Lastly, qualitative and mixed-method designs may supplement the current results to allow understanding more of how the Islamic principles of operations are perceived, negotiated and implemented in actual organisational conditions.

REFERENCES

Ab Talib, M. S., & Hamid, A. B. A. (2014). Halal logistics in Malaysia: A SWOT analysis. *Journal of Islamic Marketing*, *5*(3), 322–343. https://doi.org/10.1108/JIMA-03-2013-0018

Abdul Ghani Azmi, I. (2015). Islamic human resource practices and organisational performance. *Journal of Islamic Accounting and Business Research*, *6*(1), 2–18. https://doi.org/10.1108/JIABR-02-2012-0010

Abuznaid, S., & Bader, Y. (2023). Islamic management and leadership: A systematic literature review. *Journal of Islamic Accounting and Business Research*, *14*(3), 437–455. https://doi.org/10.1108/JIABR-02-2022-0051

Afonso, T., Alves, A. C., & Carneiro, P. (2021). Lean Thinking, Logistic and Ergonomics: Synergetic triad to prepare shop floor work systems to face pandemic situations. *International Journal of Global Business and Competitiveness*, *16*(S1), 62–76. https://doi.org/10.1007/s42943-021-00037-5

Ali, A. J., & Al-Aali, A. (2015). Marketing and ethics: What Islamic ethics have contributed and the challenges ahead. *Journal of Business Ethics*, *130*(4), 835–845. https://doi.org/10.1007/s10551-014-2256-5

Anggara, A. A., Kaukab, M. E., & Randikaparsa, I. (2024). Optimizing halal supply chains in the food industry: Enhancing sales management through ERP system integration. *Asian Journal of Economics, Business and Accounting*, *24*(2). https://doi.org/10.9734/ajeba/2024/v24i21219

Anwar, U. A. A., Nurhakim, H. Q., Hamidah, K., Azzahra, S. F., & Arkani, Z. H. (2024). MSMEs awareness in halal certification from an operations management perspective. *Amwaluna: Jurnal Ekonomi dan Keuangan Syariah*, *8*(1), 66–75. https://doi.org/10.29313/amwaluna.v8i1.2977

Aziz, W. A. W. A., Mohamed, S. B., Muda, M. S., & Halim, M. A. S. A. (2014). *Islamic quality management toward business operation of Malaysian Moslem entrepreneurs*.

Beekun, R. I., & Badawi, J. A. (2019). Leadership: An Islamic perspective. *International Journal of Islamic and Middle Eastern Finance and Management*, *12*(3), 391–404. https://doi.org/10.1108/IMEFM-01-2018-0007

Bender, S., Card, D., Heining, J., & Kline, P. (2016). *Management practices, workforce selection, and productivity* (NBER Working Paper No. 22101). National Bureau of Economic Research. https://doi.org/10.3386/w22101

Bloom, N., Sadun, R., & Van Reenen, J. (2016). *Management as a technology?* (NBER Working Paper No. 22327). National Bureau of Economic Research. https://doi.org/10.3386/w22327

Bloom, N., & Van Reenen, J. (2007). Measuring and explaining management practices across firms and countries. *The Quarterly Journal of Economics*, *122*(4), 1351–1408. https://doi.org/10.1162/qjec.2007.122.4.1351

Botti, L., *et al.* (2017). Integrating ergonomics and lean manufacturing principles in a hybrid assembly line. Computers & Industrial Engineering, 111, 481–491. https://doi.org/10.1016/j.cie.2017.05.011

Dhar, B. K., Masruki, R., Mutalib, M., Rahouma, H. M., Sobhani, F. A., & Absar, M. M. N. (2018). Mediating effect of

organisational commitment between Islamic human resource practices and organisational performance among Islamic banks of Bangladesh. *The Journal of Muamalat and Islamic Finance Research*, 54–65.

Elzoubi, O. A., Khan, I., & Balwi, M. A. W. F. B. M. (2021). Quality management: A study of concepts and semantics from Islamic perspective [إدارة الجودة: دراسة في المفاهيم والدلالات من منظور إسلامي]. *2*(*1*), 1–16.

Gunardi, S. (2023). The role of Shari'ah principles in guaranteeing halal logistics: A review. *Halalsphere*, *3*(1), 40–46. https://doi.org/10.31436/hs.v3i1.36

Harun, H. M. F., Saidon, R., Samori, Z., Zulaipa, R., & Munirah, A. (2017). Maslahah approach in halal-logistics operation. *Pertanika Journal of Social Science and Humanities*, *25*, 1–13.

Ibrahim, N., & Markom, R. (2024). Embracing Maqasid Al-Shariah and sustainable development goals in takaful legal framework. *Jurnal Undang-Undang Dan Masyarakat*, *34*(2), 16–28. https://doi.org/10.17576/juum-2024-3402-02

Kadir, M. R. A., Rahman, A. A., & Mutalib, M. A. (2020). Islami ` c values and organisational performance: Evidence from halal firms. *Journal of Islamic Marketing*, *11*(3), 573–588. https://doi.org/10.1108/JIMA-02-2018-0024

Kasim, E. S., Daud, D., Alam, M. M., Omar, N., & Kusrini, E. (2022). Application of Maqasid Al-Shariah into supply chain management practices for sustainable development. https://doi.org/10.31219/osf.io/789vz

Khan, K., & Khan, M. (2010). Human resource management: An Islamic perspective. *Asian Journal of Business and Management Sciences*, *1*(1), 1–10.

Khan, S., Farooq, Q., & Hussain, A. (2021). How Islamic work ethics influence organisational performance: The mediating role of knowledge sharing and innovation. *Journal of Islamic Business and Management*, *11*(1), 1–19. https://doi.org/10.26501/jibm/2021.1101-001

Liao, W. C., & Han, T. S. (2019). Lean production and organisational performance: Moderating roles of ability- and motivation-focused human resource management. *International Journal of Human Resources Development and Management*, *19*(4), 335–354. https://doi.org/10.1504/IJHRDM.2019.104340

Manaf, N. H., & Zein, I. (2011). Lean management and Islamic perspective: Convergence in diversity. *Proceedings of the International Conference on Islamic Management*.

Rohaeni, Y., & Sutawijaya, A. H. (2020). Pengembangan model konseptual manajemen rantai pasok halal studi kasus Indonesia [Development of a conceptual model of halal supply chain management: An Indonesian case study]. *J@ti Undip: Jurnal Teknik Industri*, *15*(3), 177–188. https://doi.org/10.14710/JATI.15.3.177-188

Scur, D., Sadun, R., Van Reenen, J., Lemos, R., & Bloom, N. (2021). The World Management Survey at 18: Lessons and the way forward. Oxford Review of Economic Policy, 37(2), 231–258. https://doi.org/10.1093/oxrep/grab009

Talib, M. S. A., Zulfakar, M. H., & Kurniawati, D. A. (2025). Sustainable halal supply chain management: A multi-theory perspective. *Journal of Islamic Marketing*. https://doi.org/10.1108/jima-04-2024-0157

Toor, S.-U.-R. (2007). Developing management from Islamic perspectives (MIP) as a formal academic discipline. *American Journal of Islamic Social Sciences*, *24*(4), 1–20.

Vadivel, S. M., Kumar, V., & Verma, P. (2024). Lean facility layout selection in a post service to enhance operational performance: A graph theory model. *The TQM Journal*. https://doi.org/10.1108/tqm-05-2024-0201