

The Significance of Michael Porter's Theories in the Development of Smallholders Awareness Training Model (SAT-Model)

Hassan Marzukhi^{a*}, Mawar Murni Yunus^b, Latiffa Bibi Mustafa Hameed^c, Mohd Ridwan Mohd Jamil^d

^aOlympia Education Malaysia

^{bc}Universiti Islam Selangor (UIS), Malaysia

^dUniversiti Pendidikan Sultan Idris (UPSI)

* Corresponding author e-mail: hassan0908@gmail.com

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ABSTRACT

This paper explores the adaptation and integration of Michael Porter's strategic-management theories—particularly the Five Forces Model, Value Chain Framework, and Generic Strategies of Competitive Advantage—in developing the Smallholders Awareness Training (SAT) Model. The SAT-Model was created to strengthen the competitiveness, ethical awareness, and sustainability of Malaysian oil-palm smallholders, aligning their activities with both Islamic Business Ethics (IBE) and Good Agricultural Practices (GAP). The study applied a Design and Development Research (DDR) approach consisting of three phases: need analysis, model design and development, and usability evaluation. The model synthesises Porter's analytical logic with Islamic ethical and social values, establishing a framework for both competitive and moral excellence. Results show that Porter's theories effectively guided the model's competitiveness dimension, while IBE ensured that the pursuit of profit was balanced by divine accountability. This integration demonstrates how modern strategic frameworks can be localised for agricultural and ethical transformation in emerging economies.

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INTRODUCTION

The palm-oil industry remains a cornerstone of Malaysia's economy, generating employment for over half a million smallholders who cultivate fewer than 40 hectares each (MPOB, 2020). These smallholders serve as the upstream foundation of a complex value chain extending through fruit dealers, millers, refiners, and exporters. However, despite their importance, smallholders face multiple challenges—volatile prices, limited access to technology, fluctuating yield, and rising sustainability demands from global markets such as the European Union (Hassan, et al. 2021). To address these issues, the *Smallholders Awareness Training (SAT) Model* was conceptualised and developed (Hassan, 2024). The model provides a structured training and awareness framework focusing on three main dimensions: competitiveness, ethical conduct through *Islamic Business Ethics (IBE)*, and sustainability through Good Agricultural Practices (GAP).

Michael Porter's strategic theories (1980, 1985, 2008) underpin the competitiveness component of the model. By applying Porter's logic—originally designed for corporate environments—to the realities of smallholders, this research demonstrates that even rural agricultural actors can benefit from strategic-management principles. Porter's frameworks allowed the SAT-Model to articulate how farmers could analyse their environment, build collective strength, and compete fairly while upholding ethical and religious values (Aziz & Hassan, 2024).

The objective of this article is to critically discuss the significance of Porter's theories in the development of the SAT-Model and to show how a hybrid of Western strategic theory and Islamic ethical philosophy can empower smallholders for sustainable socio-economic progress.

Theoretical Background. Porter's Conceptual Contribution. Michael Porter revolutionised modern strategic management through his integrated understanding of competitive advantage. His **Five Forces Model** (Porter, 1980) positions industry rivalry, supplier power, buyer power, threat of substitutes, and threat of new entrants as determinants of profitability (Lee & Chen, 2022). Meanwhile, his **Generic Strategies** (Porter, 1985) outline three strategic routes—cost leadership, differentiation, and focus—through which organisations can achieve superior performance. His **Value Chain Framework** dissects operations into primary and support activities, showing how value is created and sustained.

Together, these frameworks form a comprehensive theory of how firms gain and maintain competitive advantage. Porter's later work on *Creating Shared Value* (Porter & Kramer, 2011) emphasised aligning profit with social responsibility, a principle that aligns naturally with Islamic teachings on ethical commerce (*muamalah*) (Al-Qaradhawi, 2009; Ahmad & Latif, 2024).

Limitations and Reinterpretation. While Porter's theories have global influence, critics argue that they are grounded in capitalist rationality and assume stable, profit-maximising markets (Grundy, 2006). In contrast, smallholders operate within socially embedded, resource-constrained systems where values such as trust (*amanah*), justice (*'adl*), and sincerity (*ikhlas*) guide behaviour as much as competition (Al-Aidaros, 2013). Thus, the SAT-Model reinterprets

Porter's frameworks through the ethical lens of Islam, integrating divine accountability (*taqwa*) with strategic positioning.

This reinterpretation bridges two worlds: Porter's analytical precision (Hales & McLarney, 2017) and Islam's moral compass (Al-Qaradhawi, 2009). In doing so, it transforms the goal of "competitive advantage" from merely outperforming rivals to achieving *barakah* (spiritual prosperity) through ethical excellence.

CONCEPTUAL INTEGRATION: Porter and the SAT-Model. Overview of the SAT-Model. The SAT-Model (Figure 1.0) was developed through a rigorous *Design and Development Research (DDR)* process. It integrates five principal components:

1. **Training Objectives (TO)** – defining awareness goals in competitiveness, ethics, and sustainability.
2. **Training Content (TC)** – structured materials covering GAP, IBE, and strategic awareness.
3. **Role of Smallholders (RS)** – self-management, record-keeping, and adherence to ethical trading.
4. **Role of Authorities (RA)** – technical support, certification, and continuous monitoring.
5. **Training Evaluation (TE)** – assessing outcomes using expert consensus and usability measures.

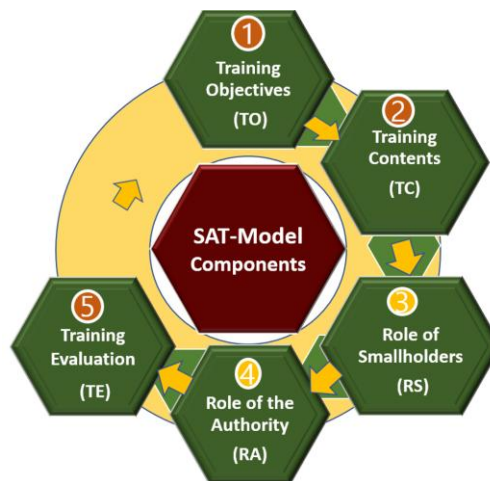


Figure 1.0: The Smallholders Awareness Training (SAT) Model (Hassan, 2024)

Each component was validated using the Fuzzy Delphi Method (FDM) (Hassan et al., 2023) and Nominal Group Technique (NGT), ensuring empirical and expert robustness. Porter's theories served as the structural foundation for competitiveness (Porter, 1980), while Islamic values defined the ethical boundary conditions (Hassan, 2024).

Porter's Five Forces in the Smallholder Context. In the smallholder oil-palm sector, Porter's Five Forces framework provides an analytical structure for understanding how external pressures influence sustainability and competitiveness (Lim and Lau, 2023). Supplier and buyer powers dominate market relations, while the threat of substitutes and new entrants drives innovation and adaptation. The SAT-Model reframes rivalry as cooperative benchmarking, empowering farmers through collective strength and shared learning.

The **power of suppliers** is evident in the heavy reliance of smallholders on fertiliser, chemical, and seed suppliers who control input prices. Through Porter's framework, the SAT-Model encourages cooperative purchasing and resource pooling among smallholders to reduce dependency and create collective bargaining strength.

The **power of buyers**, particularly millers and fruit dealers, represents another major challenge. Smallholders often sell their produce through intermediaries who dictate prices. The SAT-Model applies Porter's principle of countervailing power by guiding smallholders to form cooperatives and negotiate collectively with buyers. This transforms their passive position into an active and informed one, improving both pricing transparency and fairness.

The **threat of substitutes** arises from the availability of competing vegetable oils, such as soybean and sunflower, which threaten palm oil's market share. In response, the SAT-Model integrates awareness modules that focus on quality enhancement and differentiation through sustainable and ethical branding. Smallholders are trained to position their products as superior in both quality and moral value, aligning with global demands for ethically sourced palm oil.

The **threat of new entrants** in this sector takes the form of changing regulations and new sustainability certification standards, such as the European Union Deforestation Regulation (EUDR). By applying Porter's concept of entry barriers, the SAT-Model helps smallholders understand that compliance with these standards creates a form of strategic advantage, as meeting such requirements strengthens their position in international markets.

Lastly, **industry rivalry** among smallholders typically results in price undercutting and unhealthy competition. The SAT-Model redefines rivalry as *cooperative benchmarking*, where competition is transformed into collaboration and shared improvement. Through mutual learning, smallholders increase productivity, share innovations, and raise ethical standards collectively.

In this way, Porter's Five Forces are not merely theoretical constructs but become practical instruments that empower smallholders to interpret their competitive environment critically, act strategically, and sustain ethical competitiveness.

The Value Chain as a Moral and Strategic Map. Porter's Value Chain explains how activities from input acquisition to customer delivery contribute to competitive advantage. In the SAT-Model, each link is reinterpreted as a site of both economic and moral value creation. It is represented in Table 1.0.

Table 1.0: Moral and Strategic Map Value Chain

Porter's Activity	SAT-Model Application	IBE Dimension
Inbound logistics	Proper fertiliser handling, waste management	<i>Amanah</i> (trust)
Operations	Harvesting ethics, labour fairness	<i>'Adl</i> (justice)
Outbound logistics	Clean transport, fair weighing	<i>Sidq</i> (truthfulness)
Marketing & sales	Transparent pricing, cooperative bargaining	<i>Ikhlas</i> (sincerity)
Service	Continuous feedback, mentoring	<i>Ihsan</i> (excellence)

Thus, the value chain becomes not only an operational model but also a moral curriculum that guides smallholders in day-to-day decision-making (FAO, 2024).

Generic Strategies and Ethical Competitiveness. Porter's Generic Strategies—cost leadership, differentiation, and focus—are reinterpreted in the SAT-Model to cultivate ethical competitiveness. Cost leadership arises from collective efficiency and shared knowledge. Differentiation is achieved through adherence to MSPO/RSPO certification (Senawi, Omar, & Ibrahim, 2019) and Islamic values such as *'adl* (justice), *amanah* (trustworthiness), and *ihsan* (excellence) (Aziz & Hassan, 2024). The focus strategy targets halal and sustainable markets in Asia and the Middle East (Ahmad & Latif, 2024). These strategies integrate moral values, aligning competitiveness with accountability and spiritual purpose (Rahim & Mohd Salleh, 2023).

Cost leadership is pursued through cooperative efficiency, resource sharing, and the adoption of best practices in production. Smallholders are trained to manage costs through joint purchasing, knowledge exchange, and efficient use of farm inputs. This approach achieves cost reduction without compromising ethical or environmental standards, reflecting the Islamic principle of *amanah* (trustworthiness) in economic management.

Differentiation in the smallholder context is achieved not through mass marketing but through moral distinctiveness. By adhering to certification systems such as MSPO and RSPO and aligning with Islamic values—*'adl* (justice), *sidq* (truthfulness), and *ihsan* (excellence)—smallholders distinguish their products as ethical, sustainable, and halal-compliant. Differentiation thus shifts from superficial market branding to deep moral authenticity, strengthening credibility in the global supply chain.

Focus strategy is applied through specialisation in niche markets, particularly halal and sustainably certified palm oil destined for ethically sensitive regions in Asia and the Middle East. By understanding the preferences of these markets, smallholders can target specific customer bases that value both quality and ethical integrity.

Collectively, these strategies establish a model of *moral competitiveness* (Tan & Ghazalli, 2021; Zulkifli & Hamid, 2022), where the pursuit of profit is guided by divine accountability (*taqwa*). The SAT-Model transforms traditional competitive advantage into a higher form of *ethical advantage*—one that harmonises operational efficiency, quality differentiation, and spiritual consciousness in economic activity.

RESEARCH METHODS

Design and Development Research (DDR). The DDR approach (Richey & Klein, 2007) was employed to build and validate the SAT-Model. It involves iterative stages of analysis, design, development, and evaluation, ensuring theoretical and practical alignment.

Phase 1: Needs Analysis. Interviews with experts from MPOB, KOPERASI LADANG BERHAD and an agronomist, identified knowledge gaps in competitiveness, ethics, and GAP adoption. Findings indicated that while smallholders possessed technical farming skills, they lacked awareness of market forces and ethical frameworks (Rahman & Abdullah, 2023).

Phase 2: Design and Development. Drawing on Porter's theories, the SAT-Model's components were formulated. The Fuzzy Delphi Method (FDM) was used to achieve expert consensus (α -cut ≥ 0.5 ; $d \leq 0.2$; 75% agreement). This phase established the theoretical integrity of competitiveness and IBE integration.

Phase 3: Usability Evaluation. The Modified Nominal Group Technique (M-NGT) tested the model's practical applicability with six experts. Each component scored above 70% usability, confirming its relevance and clarity. The model was recognised as the first of its kind in integrating divine ethics with competitiveness in Malaysia's oil-palm industry.

Theoretical Rigor. The DDR framework ensures both internal and external validity. Porter's theories grounded the competitive dimension, while Islamic ethical theory anchored the moral one. The resulting model exemplifies *epistemological integration*—bridging Western strategic logic and Islamic metaphysics.

RESULTS & DISCUSSION

Porter's Theories as the Backbone of Competitiveness. The findings indicate that Porter's Five Forces effectively diagnose structural weaknesses among smallholders—particularly dependency on buyers and suppliers. By framing these relationships strategically, the SAT-Model trains farmers to recognise leverage points. For instance, when millers suppress prices, cooperatives can respond collectively rather than individually, reducing vulnerability.

The Modified Five Forces Framework. Hassan (2024) introduced a *Modified Five Forces Model* (Figure 2.0) for smallholders, adding a sixth element—*Divine Accountability*—as an overarching moderating force. This addition reframes competition within moral boundaries, ensuring that strategic action aligns with Islamic teachings on fairness and sustainability.

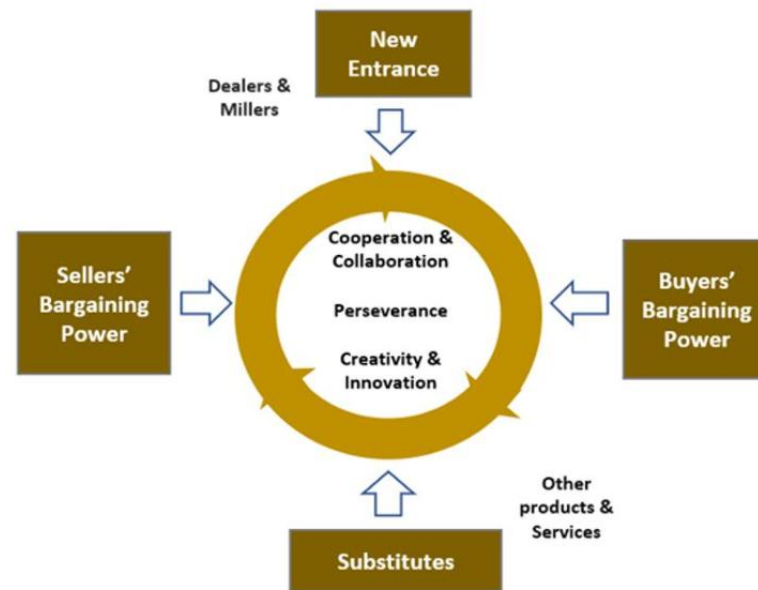


Figure 2.0: Modified Five Forces Model (Hassan 2024)

The Value Chain as an Educational Tool. The value chain was converted into visual learning aids during training sessions. Farmers identified where losses occurred—such as poor harvesting timing or improper weighing—and proposed corrective actions. By internalising cause-and-effect relationships, participants cultivated analytical and reflective thinking—core attributes of strategic awareness.

Ethical Competitiveness and Shared Value. The SAT-Model aligns closely with Porter & Kramer's (2011) *Shared Value* concept, which integrates business success with social progress. However, by embedding IBE, the model goes further—redefining value not just in social but spiritual terms (Alwi & Ibrahim, 2022). Thus, smallholders gain both material productivity and inner fulfilment (Hales & McLarney, 2017).

Implications For Policy, Practice, And Research. The SAT-Model has broad implications across multiple domains. For smallholders, it fosters strategic literacy and ethical awareness, empowering them to analyse market forces and act collectively. For policymakers, it provides a framework that aligns competitiveness with ethics and national priorities under Malaysia's Shared Prosperity Vision 2030 and NAP 2.0. For academia, it demonstrates the integration of Western strategic theory with Islamic epistemology and the DDR methodology. For the global context, it offers a transferable blueprint for ethical agribusiness and sustainable smallholder empowerment worldwide (World Bank, 2023).

For Smallholders. For smallholders, the SAT-Model cultivates a mindset of strategic literacy and ethical awareness. By applying Porter's frameworks, smallholders learn to interpret market forces analytically rather than reactively. They gain the capacity to anticipate price shifts, identify supply-chain inefficiencies, and respond collectively through cooperative action (Aziz

& Hassan, 2024). This strategic empowerment improves income stability, reduces exploitation, and fosters long-term sustainability. Ethical business conduct—such as honesty in trade, fair labour treatment, and environmental responsibility—also enhances their reputation with buyers and regulators. Awareness of value-chain linkages enables smallholders to recognise where inefficiencies occur, thereby improving productivity and sustainability outcomes across the farming process.

For Policy Makers. For policymakers, the SAT-Model provides a structured and evidence-based framework to enhance Malaysia's smallholder development agenda. It offers an integrated approach that balances economic growth with ethical responsibility, aligning directly with the *Shared Prosperity Vision 2030* and the *Sustainable Development Goals (SDGs)*. By institutionalising the SAT-Model within agencies such as MPOB and RISDA, policymakers can standardise training and certification processes, ensuring consistent adoption of sustainability and ethical practices nationwide (Awang & Ibrahim, 2016). Integrating Porter's frameworks into agricultural policy supports Malaysia's ambition to be recognised as a global leader in ethical palm-oil production, bridging competitiveness with accountability.

For Academia. For academia, this research contributes to theoretical pluralism by demonstrating how Western management theories can be meaningfully localised within Islamic epistemology. The integration of Porter's strategic logic with Islamic Business Ethics offers a new research frontier for scholars interested in transdisciplinary frameworks (Alwi & Ibrahim, 2022). The study also strengthens the methodological application of Design and Development Research (DDR) in social and agricultural contexts, proving that DDR can generate practical, ethical, and strategic innovations simultaneously. Future academic work may extend this model into other domains—such as Islamic finance, community entrepreneurship, or rural innovation—to explore how moral and strategic theories can co-evolve.

For the Global Context. Globally, the SAT-Model holds significance for other developing and Muslim-majority nations that rely on smallholder agriculture. The model provides a transferable framework adaptable to crops such as cocoa, coffee, and rubber. Its ethical foundation resonates with international demands for sustainable, traceable, and responsible production systems. Moreover, by positioning Malaysia as a thought leader in ethical agribusiness, the model reinforces the idea that moral values and strategic acumen can coexist as complementary forces in achieving equitable global trade. It offers a replicable blueprint for nations seeking to balance competitiveness with compassion and sustainability with spirituality.

Limitations And Future Research. As a conceptual and developmental study, the SAT-Model's effectiveness was evaluated through expert consensus rather than longitudinal field trials. Future research should include pre- and post-training impact studies, econometric assessments of productivity gains, and cross-country comparisons. Incorporating digital platforms for training (e-TVET and online modules) could further enhance scalability.

CONCLUSION & SUGGESTION

Michael Porter's theories define competitiveness, yet their deeper significance lies in adaptability. The integration of Porter's frameworks into the SAT-Model demonstrates that strategic and ethical principles can coexist. By transforming rivalry into collaboration and awareness into empowerment, the SAT-Model introduces a new paradigm of sustainable, moral, and competitive excellence within Malaysia's palm-oil sector and beyond.

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