THE LANGUAGE OF VISIBILITY: EXPLORING THE NEXUS OF AI-DRIVEN SEO AND DIGITAL CAPABILITY ON THE BUSINESS VISIBILITY AMONG MALAYSIAN SMES

Nur Zulaikha Zuraimi*
Universiti Teknologi MARA Shah Alam
zulaikha.zuraimi@gmail.com

Azila Jaini
Universiti Teknologi MARA Kampus Segamat Johor

Abstract: As we navigate 2026, the global search ecosystem has evolved from a directory of links into an intelligent "Answer Engine," necessitating a shift toward the "Language of Visibility" where AI-driven SEO semantic search meets human-centric branding. This research investigates this critical nexus to determine how it enhances the business visibility of Malaysian Small and Medium-sized Enterprises (SMEs). Utilizing a conceptual research design, the study integrates theories of the Resource-Based View (RBV) framework and VRIN component to examine how AI-driven SEO, specifically Generative Engine Optimization (GEO), remains fundamentally dependent on the four traditional pillars: On-page, Off-page, Local, and Technical SEO. Ultimately, the synthesis reveals that digital capability serves as a primary driver for sustainable competitiveness, framing the mastery of AI-driven SEO as a vital digital capability for the future of Malaysian entrepreneurship. The primary research gap addressed by this study focuses on the specific adoption of AI-driven digital marketing within the Malaysian SME sector, where limited resources and market competition create barriers to technological integration. The synthesis reveals that the "nexus" of visibility is achieved when AI's predictive power synergizes with an entrepreneur's digital capability. Furthermore, the findings highlight that digital capability serves as a moderator, amplifying the impact of brand visibility for Malaysian SMEs. By framing digital visibility as both a linguistic and strategic challenge, this study offers fresh insights for Malaysian policymakers on the necessity of supporting SMEs with the digital literacy required to turn technological adoption into a sustained competitive advantage.

Keywords: AI SEO, Digital Capability, Business Visibility, Malaysian SMEs, SEO

1. Introduction

Small and Medium-sized Enterprises constitute 98.5% of Malaysia's business establishments, yet a persistent gap remains between basic technical access and the strategic utilization of AI for market prominence (Hoo et al., 2023; Jaish et al., 2023; Yen et al., 2024). As the search landscape transitions from traditional "Retrieve-and-Rank" to AI-synthesized "Answer Engine" models, SMEs face "big brand bias" and severe liquidity constraints (Chen et al., 2025; Jaish et al., 2023; Ma et al., 2025). Survival in this era necessitates mastering the "Language of Visibility" the strategic alignment of digital content with semantic AI requirements to secure authoritative citations (Chen et al., 2025; Lüttgenau et al., 2025).

This research investigates the Strategic Nexus where AI-driven SEO and internal Digital Capability converge to drive sustainable performance (Bakashaba & Bindeeba, 2025; Yang et al., 2022). Grounded in the Resource-Based View, the study argues that while AI tools are accessible "threshold resources," the firm's internal maturity to reconfigure these assets into path-dependent strategies creates a VRIN-qualified advantage (Bakashaba & Bindeeba, 2025; Yang et al., 2022; Yen et al., 2024). Ultimately, success in volatile, AI-driven search ecosystems is critically moderated by an enterprise's organizational readiness to navigate the shift toward synthesized visibility (Mou et al., 2022; Yen et al., 2024).

2. Literature Review

2.1 *Theoretical Underpinning: Resource-Based View and Business Visibility*

The Resource-Based View posits that superior firm performance is derived from resources that are Valuable, Rare, Inimitable, and Non-substitutable (Bakashaba & Bindeeba, 2025; Samat et al., 2020). For Malaysian SMEs, digital assets such as AI-driven SEO have transitioned from technical utilities to strategic resources essential for overcoming traditional resource constraints (Hoo et al., 2023; Yen et al., 2024). Research indicates that perceived usefulness and ease-of-use account for 23% of the variance in AI adoption intention within this sector (Enshassi et al., 2025). Within this "Nexus," the "Language of Visibility" the semantic and linguistic quality of AI-optimized content functions as the "valuable resource" that directly produces Business Visibility.

While standard AI tools are increasingly categorized as "threshold resources" accessible to all, they do not inherently satisfy VRIN criteria (Bakashaba & Bindeeba, 2025). The true competitive advantage lies in an SME's firm-specific capability to reconfigure these tools into a unique, path-dependent digital presence (Bakashaba & Bindeeba, 2025; Yang et al., 2022). By semantically encoding local market knowledge into AI-friendly formats, firms create visibility that is both Rare and Inimitable (Bakashaba & Bindeeba, 2025). This strategic integration enhances online brand positioning and findability, serving as the primary driver for revenue expansion and market share (Hoo et al., 2023; Mou et al., 2022). Thus, mastering this "language" allows Malaysian SMEs to transform AI-driven outputs into a sustainable competitive advantage (Yen et al., 2024).Therefore, to understand the next stage of the "Language of Visibility," the following section explores the broader application of Artificial Intelligence in Digital Marketing, identify as the foundational driver for the next generation of SME growth and digital transformation (Juma'at et al., 2025; Mou et al., 2022).

2.2 *Artificial Intelligence in Digital Marketing*

Artificial Intelligence is restructuring digital marketing through hyper-personalized experiences and predictive analytics (Ma et al., 2025; Yen et al., 2024). Despite high internet penetration, Malaysian SMEs face a "30% Adoption Paradox," exacerbated by the fact that 81% of firms operate with restricted cash reserves, limiting them to basic "threshold" tools (Bakashaba & Bindeeba, 2025; Jaish et al., 2023). Consequently, transitioning to Generative Engine Optimization has become a survival-critical imperative to secure citations within AI-synthesized "Answer Engines" (Aggarwal et al., 2024; Chen et al., 2025). By adopting the "Language of Visibility" the strategic alignment of content with semantic AI requirements SMEs can achieve a 60.03% increase in organic traffic, safeguarding the sector's 38.9% contribution to the national GDP (Hoo et al., 2023; Mou et al., 2022). Understanding this transition requires examining the underlying structural requirements defined as the Foundational Pillars of SEO in the Generative Era.

2.3 *The Foundational Pillars of SEO in the Generative Era*

Generative Engine Optimization effectiveness remains anchored in four traditional pillars: On-page, Off-page, Local, and Technical SEO (Chen et al., 2025; Hoo et al., 2023). Technical SEO serves as the essential "entry point" for high-fidelity AI indexing, while On-page semantic quality and Off-page authority provide the "trust signals" necessary for AI engines to synthesize direct, citeable answers (Chen et al., 2025; Hoo et al., 2023). For Malaysian SMEs, Local SEO is critical as conversational "Answer Engines" increasingly prioritize proximity and localized relevance (Hoo et al., 2023). Under the Resource-Based View, these pillars function as Valuable and Rare resources that defend a firm's digital authority against low-quality AI noise (Bakashaba & Bindeeba, 2025; Yen et al., 2024). Mastering these foundational elements is the technical prerequisite for transitioning from simple indexing to AI-synthesized discovery, marking the fundamental shift where AI-driven SEO matures into Generative Engine Optimization (Aggarwal et al., 2024; Chen et al., 2025). Consequently, the mastery of these four pillars is the technical prerequisite for moving beyond simple indexing into the

realm of AI-synthesized discovery, marking the fundamental shift where AI-driven SEO is Generative Engine Optimization (GEO).

2.4 *AI-driven SEO is Generative Engine Optimization (GEO)*

Integrating generative AI into SEO marks a fundamental shift from ranking website links to maximizing citation frequency within AI-synthesized summaries (Chen et al., 2025; Ma et al., 2025). Termed Generative Engine Optimization, this evolution leverages Large Language Models to prioritize semantic intent and "machine scannability" over traditional keyword matching (Aggarwal et al., 2024; Lüttgenau et al., 2025). The urgency of this transition is evidenced by data showing that link clicks drop to 8% when an AI summary is present a feature now appearing in 18% of observed search queries (Chen et al., 2025). Consequently, digital strategy must pivot toward securing citations through content fluency, statistical evidence, and authoritative sentiment (Lüttgenau et al., 2025). However, a 52% skill gap within the Malaysian SME sector remains a primary barrier to effective implementation (Hoo et al., 2023). Thus, GEO functions as a dynamic capability requiring firms to reconfigure internal resources to survive the transition to conversational "Answer Engines" (Yen et al., 2024). This technological shift necessitates a deeper exploration of the intersection between tools and organizational skills, defined as The Nexus of AI-Driven SEO and Digital Capability.

2.5 *The Strategic Nexus: AI-Driven SEO and Digital Capability in Malaysian SMEs*

The Strategic Nexus represents the synergistic convergence where AI-driven SEO tools and the internal digital maturity of Malaysian SMEs align to drive market prominence (Yen et al., 2024). In Malaysia's resource-constrained landscape where 81% of SMEs face liquidity limitations AI adoption often remains a "threshold resource" (a basic necessity) rather than a competitive edge (Bakashaba & Bindeeba, 2025; Jaish et al., 2023). However, when moderated by high Digital Capability, firms can overcome the 52% national skill gap to reconfigure these basic tools into a unique, path-dependent "Language of Visibility" (Hoo et al., 2023; Yen et al., 2024). This nexus transforms standardized technology into a VRIN-qualified dynamic capability, enabling small firms to bypass "big brand bias" and secure authoritative citations in conversational "Answer Engines" (Bakashaba & Bindeeba, 2025; Chen et al., 2025).

To determine if the mastery of the "Language of Visibility" offers a sustainable competitive advantage for Malaysian SMEs, it is necessary to evaluate these integrated digital assets against the specific criteria of value, rarity, inimitability, and non-substitutable, as detailed in the VRIN Analysis of AI-Driven SEO Resources

2.6 *VRIN Analysis of AI-Driven SEO Resources*

Integrating the VRIN component of the RBV framework allows for a deeper examination of why AI-driven SEO serves as a sustainable competitive advantage for Malaysian SMEs (Teoh et al., 2024). According to Teoh et al. (2024), while basic SEO tools are common, the inimitable combination of local market knowledge, semantic content quality, and technical mastery creates a resource that is difficult for competitors to duplicate. Hoo et al. (2023) further suggest that when these digital assets are non-substitutable meaning they cannot be easily replaced by paid advertising alone they provide the "strategic weight" necessary for long-term business visibility and growth in the generative era (Hoo et al., 2023). The study applies the Resource-Based View to classify AI-driven SEO as a strategic resource. The following table synthesizes these attributes specifically for the Malaysian SME context.

Table 1: VRIN Analysis of AI-Driven SEO and GEO for Malaysian SMEs

VRIN Criterion	Application to AI-Driven SEO & GEO	Strategic Impact for Malaysian SMEs
Valuable	Secures brand citations and "mentions" within LLM-powered Answer Engines (Elkhatibi & Boussedra, 2025; Ziakis & Vlachopoulou, 2024).	Circumvents high ad spend by leveraging organic visibility in the new search layer (Hoo et al., 2023; Mou et al., 2022).
Rare	Synergy between niche local brand ontology and structured data signals (Kaur & Kumar, 2024; Mou et al., 2022).	Creates a unique digital footprint that global competitors lack in regional semantic relevance (Enshassi et al., 2025).
Inimitable	Rooted in proprietary "Brand Voice" and high Technical SEO health (e.g., Schema) (Mou et al., 2022; Ziakis & Vlachopoulou, 2024).	Competitors cannot easily replicate semantic trust and authority established over time (Daoud et al., 2024; Elkhatibi & Boussedra, 2025).
Non-Substitutable	Primary conduit for discovery as search transitions to conversational AI interfaces (Ocran et al., 2024; Ziakis & Vlachopoulou, 2024).	Essential survival mechanism in 2026 as engines move to "providing answers" (Mou et al., 2022; Yen et al., 2024).

Notes: *Variables Alignment

Based on Table 2, AI-driven SEO and Generative Engine Optimization function as a strategic VRIN resource for Malaysian SMEs by securing valuable brand mentions in conversational "Answer Engines" to reduce reliance on costly traditional advertising (Elkhatibi & Boussedra, 2025; Hoo et al., 2023; Ziakis & Vlachopoulou, 2024). This resource is considered rare due to the synergy between niche brand ontology and structured data, creating a regional semantic footprint that global competitors struggle to replicate in local contexts (Enshassi et al., 2025; Kaur & Kumar, 2024; Mou et al., 2022). It remains inimitable because it is rooted in a proprietary "Brand Voice", establishing a level of semantic trust and authority that rivals cannot easily duplicate (Daoud et al., 2024; Mou et al., 2022; Ziakis & Vlachopoulou, 2024). Ultimately, it is non-substitutable, serving as the critical survival conduit for discovery as the search landscape transitions toward direct-answer interfaces by 2026 (Ocran et al., 2024; Yen et al., 2024; Ziakis & Vlachopoulou, 2024).

2.7 *AI-Driven SEO and Traditional SEO Utilization Challenges for SMEs*

Malaysian SMEs face chronic resource constraints hindering both traditional and AI-driven SEO (Hoo et al., 2023; Jaish et al., 2023). A critical knowledge gap is the primary barrier, with 47% of SMEs reporting that system complexity prevents the transition to advanced digital tools (Enshassi et al., 2025). This is compounded by severe financial limitations, where 81% of firms operate with restricted cash reserves, making the costs of specialized audits and premium AI optimization prohibitive (Jaish et al., 2023; Yen et al., 2024). Consequently, many firms struggle to maintain foundational Technical SEO pillars, such as site speed and mobile optimization, which undermines their baseline visibility before advanced AI strategies can be implemented (Hoo et al., 2023; Yen et al., 2024).

The transition to Generative Engine Optimization introduces technical layers SMEs are often unprepared to navigate (Aggarwal et al., 2024; Chen et al., 2025). Unlike traditional search, generative engines prioritize content "synthesizability" and machine-readability over manual keyword matching (Chen et al., 2025; Ma et al., 2025). Many SMEs fail this transition because their digital assets lack the structured data schemas required by AI synthesizers, which often favor larger competitors due to "big brand bias" (Chen et al., 2025; Lüttgenau et al., 2025). This "Digital Capability Gap" prevents firms from transforming their presence into a VRIN-qualified resource unless they master the "Language of Visibility" required for the generative era (Bakashaba & Bindeeba, 2025; Yen et al., 2024).

2.8 *Research Gap*

Despite the growing body of literature on digital transformation, several critical research gaps remain regarding the intersection of AI-driven SEO for Malaysian SMEs. First, an Evolutionary Gap exists; while existing studies examine traditional SEO pillars in the Malaysian context (Ahmad et al., 2024; Hoo et al., 2023), there is a significant lack of research exploring how these pillars serve as the foundational dependency for Generative Engine Optimization (Chen et al., 2025; Hoo et al., 2023).

Most current research incorrectly treats AI-driven search as a technical replacement rather than an evolution that requires structural integrity for effective AI synthesis (Chen et al., 2025; Rejón-Guardia et al., 2025).

Second, a Theoretical Gap persists in the application of the Resource-Based View. Because standard AI tools are widely accessible, they often fail the "Rarity" criterion of the VRIN framework (Bakashaba & Bindeeba, 2025). Current literature fails to categorize the "Language of Visibility" the unique integration of semantic depth and brand ontology as the actual VRIN-qualified strategic resource required to bypass "big brand bias" in generative AI summaries (Chen et al., 2025; Lüttgenau et al., 2025).

Third, a persistent "Nexus Gap" remains in localized research. Current literature frequently investigates AI adoption (Lai et al., 2025) and organizational digital literacy (Yen et al., 2024) as isolated variables, yet there is a dearth of research examining the Strategic Nexus, or the synergistic interaction between these tools and internal Digital Capability (Hoo et al., 2023). Simply adopting AI tools does not guarantee sustained performance (Lai et al., 2025); rather, Digital Capability acts as the primary driver that converts technological potential into tangible Business Visibility within resource-constrained environments (Jaish et al., 2023; Yen et al., 2024).

Finally, a Contextual Gap is evident as global studies on GEO are emerging (Aggarwal et al., 2024; Rejón-Guardia et al., 2025), but localized conceptual frameworks are lacking for Malaysian entrepreneurs navigating "zero-click" search behaviour (Chen et al., 2025). Current strategies often fail to account for the specific infrastructure and literacy challenges unique to the Malaysian sector (Jaish et al., 2023; Yen et al., 2024). This research fills these voids by proposing a framework that integrates technical mastery with organizational capability to ensure sustainable competitiveness for Malaysian entrepreneurship (Hoo et al., 2023).

3. The Nexus Model of Business Visibility for Malaysian SMEs

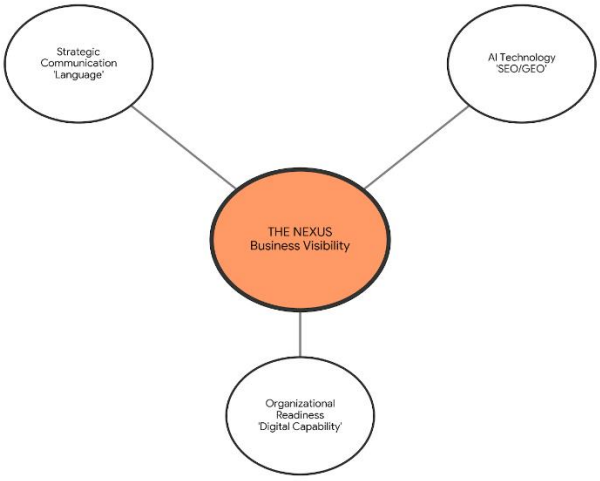


Figure 1: The Nexus Model of Business Visibility for Malaysian SMEs

Figure 1 shows The Nexus Model of Business Visibility illustrates the interdependent convergence of three strategic pillars required to achieve a sustainable market. The first pillar, Strategic Communication, focuses on the "Language" of visibility, where semantic clarity serve as the essential raw data for AI "Answer Engines" to ingest, process, and summarize (Ma et al., 2025; Patiño et al., 2025). This linguistic foundation is operationalized through the second pillar, AI Technology (SEO/GEO), which represents the transition from traditional link-based search tactics to Generative Engine Optimization designed to secure citations in conversational AI interfaces (Chen et al., 2025; Ziakis & Vlachopoulou, 2024). The final pillar, Organizational Readiness, serves as a critical internal

moderator, as high levels of digital capability and leadership maturity are prerequisites for effectively orchestrating these technical tools within the resource-constrained environments of Malaysian SMEs (Haq et al., 2025; Yen et al., 2024). Collectively, this nexus posits that business visibility is a synergistic outcome that allows local firms to leverage their unique cultural and semantic resources to remain competitive against larger global rivals (Jaish et al., 2023; Ma et al., 2025).

4. Proposed Framework

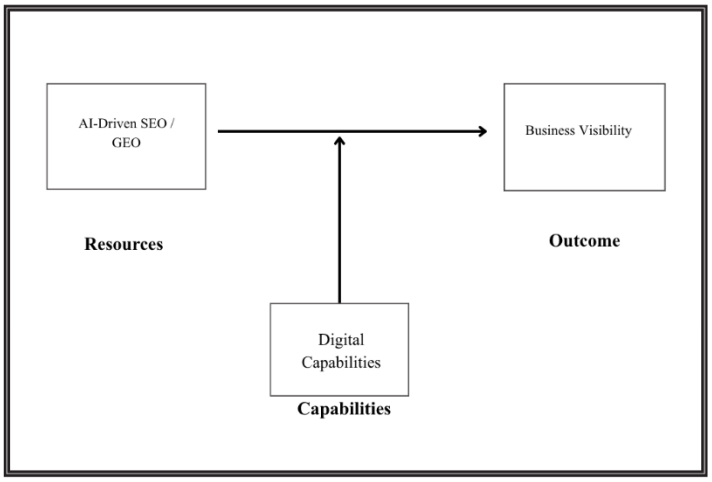


Figure 2: Proposed Research Framework (RBV)

Figure 2 shows The proposed research framework operates on a Resource-Capability-Outcome logic, integrating the Resource-Based View and Dynamic Capabilities Theory to explain how Malaysian SMEs achieve market prominence in the generative AI era (Yang et al., 2022). This framework positions AI-driven SEO, specifically Generative Engine Optimization, as the strategic independent variable, serving as the technical resource necessary to transition from traditional "Retrieve-and-Rank" models to conversational "Answer Engine" interfaces (Aggarwal et al., 2024; Rejón-Guardia et al., 2025; Samet, 2026). Crucially, the model identifies Digital Capability as a pivotal moderating variable; while AI tools are widely accessible "threshold resources," it is the firm's internal maturity and ability to sense, seize, and reconfigure these technologies that transforms them into a VRIN-compliant strategic asset (Bakashaba & Bindeeba, 2025; Yang et al., 2022). By fostering this synergistic nexus, resource-constrained SMEs can strategically leverage niche brand ontologies and authoritative "trust markers" to bypass "big brand bias," ensuring their content is synthesized and cited by AI agents (Chen et al., 2025; Samet, 2026). Ultimately, this framework provides a localized roadmap for Malaysian entrepreneurs to convert technological potential into tangible Business Visibility, thereby securing their long-term competitive advantage and contribution to the national economy (Bakashaba & Bindeeba, 2025; Rejón-Guardia et al., 2025).

5. Methodology

This study employs a conceptual research design grounded in theory synthesis and a Systematic Literature Review protocol to investigate the strategic adoption of AI-driven SEO among Malaysian SMEs (Yen et al., 2024). To ensure academic rigor, a systematic search of major databases including Scopus, Web of Science, and Google Scholar was conducted for peer-reviewed literature published between 2020 and 2025 (Chen et al., 2025; Yen et al., 2024). The search strategy was executed using specific keywords: "Generative Engine Optimization," "AI-driven SEO," "Digital Capability," and "Malaysian SMEs" (Enshassi et al., 2025). Selection criteria prioritized research addressing the transition from traditional "Retrieve-and-Rank" SEO to AI-synthesized "Answer Engine" models, organizational maturity in resource-constrained environments, and theoretical applications of the

Resource-Based View and Dynamic Capabilities Theory (Bakashaba & Bindeeba, 2025; Chen et al., 2025; Yang et al., 2022).

The methodology evaluates Generative Engine Optimization as a VRIN-qualified strategic resource (Bakashaba & Bindeeba, 2025; Yang et al., 2022). By establishing a "Resource-Capability-Outcome" logic chain, the study argues that the impact of technological adoption on Business Visibility is critically moderated by a firm's internal digital capability to sense, seize, and reconfigure these assets (Jaish et al., 2023; Mou et al., 2022). Ultimately, this systematic synthesis provides a theoretical roadmap to bridge the 30% adoption paradox and ensure sustainable competitiveness in an evolving, AI-centric marketplace (Hoo et al., 2023; Yen et al., 2024).

6. Findings

6.1 *Synthesis of Literature on the Strategic Nexus of AI-Driven SEO and Digital Capability*

The systematic synthesis of the reviewed literature identifies a critical "Strategic Nexus" where AI-driven SEO reconceptualized as Generative Engine Optimization functions as a VRIN-qualified strategic resource for Malaysian SMEs (Chen et al., 2025; Ziakis & Vlachopoulou, 2024). These critical insights, which bridge the gap between technical implementation and strategic market prominence, are concisely summarized in Table 1.

Table 2: Synthesis of Literature on the Strategic Nexus of AI-Driven SEO and Digital Capability

Synthesis Theme	Analysis Focus	Literature Evidence	Synthesis Findings
1. The "Language of Visibility" in Generative Search	Conceptual Synthesis	AI-driven search redistributes traffic away from traditional links; clicks drop to 8% when summaries are present (Chen et al., 2025).	SMEs can overcome "big brand bias" by optimizing for brand ontology and "machine-readability" (Chen et al., 2025; Ma et al., 2025). Rigorous Schema markup is the primary technical dependency for citation (Chen et al., 2025; Hoo et al., 2023).
2. Digital Capability as a Strategic Moderator	Theoretical Integration	AI-driven marketing functions as a moderating factor that amplifies the return on digital investments in resource-constrained settings (Haq et al., 2025; Lai et al., 2025).	The "Strategic Nexus" represents the point where firm maturity enables the "sense, seize, and reconfigure" loop, transforming AI from a tool into a VRIN-qualified dynamic capability (Bakashaba & Bindeeba, 2025; Yang et al., 2022; Yen et al., 2024).
3. The "30% Adoption Paradox" in Malaysia	Empirical & Contextual Review	While infrastructure is high, perceived usefulness and ease-of-use explain only 23% of adoption variance (Enshassi et al., 2025). 81% of SMEs lack the cash reserves for premium tools (Jaish et al., 2023).	Barriers are psychological and structural, not just technical. Visibility is a survival mechanism to protect the sector's 38.9% GDP contribution (Hoo et al., 2023; Jaish et al., 2023).
4. Predictive Analytics & Performance Optimization	Analytical Synthesis	Transitioning from "Retrieve-and-Rank" to "Answer Engine" models requires real-time data-driven optimization (Abrokwah-Larbi, 2023; Elkhatibi & Boussedra, 2025).	Advanced analytics enable personalized interactive marketing, allowing SMEs to respond dynamically to volatile, generative search algorithms (Abrokwah-Larbi, 2023; Mou et al., 2022).
5. Strategic Outcomes: Visibility to Growth	Empirical Evidence Synthesis	Effective navigation of the Nexus yields a 30% increase in	Visibility serves as the intermediate variable that

	traffic, 10-25% higher conversions, and a 15% expansion in market share (Mou et al., 2022).	secures long-term market resilience and sustainable competitive advantage in the generative era (Bakashaba & Bindeeba, 2025; Hoo et al., 2023).

Notes: *Synthesis of Literature

6.2 *The Critical Role of Semantic and AI-Driven SEO Strategies (The Language of Visibility)*

Research emphasizes a fundamental transition from keyword matching toward "brand ontology" and semantic optimization to maintain visibility in generative search summaries (Chen et al., 2025; Ma et al., 2025). The "Language of Visibility" is formally defined as the strategic configuration of digital content into machine-scannable, high-intent semantic structures that allow AI models to synthesize rather than merely list sa firm's value proposition (Chen et al., 2025). For Malaysian SMEs, the "Language of Visibility" functions as a strategic resource to circumvent "big brand bias" in AI-driven ecosystems (Chen et al., 2025). In practice, while traditional SEO might optimize for the static keyword "best cafe in Ipoh," the Language of Visibility utilizes Schema.org and structured FAQ data to answer specific conversational queries like: "Where is a quiet cafe in Ipoh with fast Wi-Fi and vegan options for remote work?" (Chen et al., 2025; Lüttgenau et al., 2025). Evidence suggests that high technical SEO health specifically the rigorous application of Schema markup and structured data is the primary dependency for GEO, significantly increasing the probability of a firm being cited by AI assistants (Chen et al., 2025; Hoo et al., 2023). Ultimately, this continuous refinement, driven by the firm's internal digital maturity, is essential for reinforcing brand authority and sustaining a competitive advantage in global digital markets (Hoo et al., 2023; Mou et al., 2022).

6.3 *Tangible Impact of Specific SEO Practices on Performance Metrics*

AI-driven SEO delivers quantifiable improvements in digital performance, transitioning SEO from a tactical utility to a strategic growth engine (Mou et al., 2022). Empirical evidence indicates that integrating AI-powered analytics and automated optimization can yield up to a 30% increase in website traffic and 10–25% higher conversion rates for SMEs (Mou et al., 2022). By successfully navigating the "Strategic Nexus," firms refine their search rankings while reducing overall marketing expenditures, directly fostering long-term market resilience (Hoo et al., 2023). When supported by robust digital capabilities, these practices function as VRIN-qualified resources that translate technological adoption into sustained economic benefits and enhanced market findability (Bakashaba & Bindeeba, 2025; Yen et al., 2024).

6.4 *Contextual Barriers and the "30% Adoption Paradox" in Malaysia*

Despite high internet penetration, Malaysian SMEs contend with a persistent "30% Adoption Paradox," where effective digital prominence remains restricted to a minority of the sector (Hoo et al., 2023; Yen et al., 2024). This disparity is driven by significant psychological and technical barriers, with perceived usefulness and ease-of-use accounting for only 23% of the variance in AI adoption intention (Enshassi et al., 2025). These constraints foster performance heterogeneity, ensuring that the mastery of the "Strategic Nexus" remains a Rare and Inimitable capability rather than a standard industry practice (Bakashaba & Bindeeba, 2025; Yang et al., 2022). Ultimately, for these resource-constrained firms, achieving Business Visibility is a survival-critical imperative required to safeguard the SME sector's 38.9% contribution to the national GDP (Hoo et al., 2023).

6.5 *Digital Capability as a Moderator for Strategic Competitiveness*

Finally, the Strategic Nexus occurs when an SME's internal digital capability aligns with the technical requirements of the generative search ecosystem (Yen et al., 2024). Digital capability serves as a critical moderator; research confirms that in resource-constrained settings, AI-enabled marketing strategies amplify the return on digital investments and expand market reach (Haq et al., 2025). Without the

internal maturity to "sense, seize, and reconfigure" AI insights, technological adoption remains a "threshold resource" rather than a competitive asset (Bakashaba & Bindeeba, 2025; Yen et al., 2024). Firms that successfully navigate this moderator achieve significant performance gains, including a 15% expansion in market share and customer acquisition growth of up to 50% (Mou et al., 2022). This alignment transforms AI from a technical utility into a VRIN-qualified dynamic capability that secures sustainable business visibility and market positioning (Ahmad et al., 2024; Bakashaba & Bindeeba, 2025; Yang et al., 2022).

7. Conclusion

In conclusion, this study establishes that the "Language of Visibility" the strategic alignment of a firm's brand ontology with the semantic requirements of Generative Engine Optimization is a critical survival mechanism for Malaysian SMEs navigating the transition toward "Answer Engine" models (Aggarwal et al., 2024; Rejón-Guardia et al., 2025). By prioritizing content fluency and authoritative "trust markers," resource-constrained firms can effectively mitigate "big brand bias" and secure brand citations in AI-synthesized responses (Chen et al., 2025; Samet, 2026). Crucially, the Nexus Model demonstrates that while AI-driven tools are widely available threshold resources, it is the internal Digital Capability to reconfigure these technologies into unique, path-dependent strategies that constitutes the true VRIN-compliant asset for sustainable competitive advantage (Bakashaba & Bindeeba; Yang et al., 2022). To bridge the "30% adoption paradox" and safeguard their 38.9% contribution to the national GDP, Malaysian SMEs must move beyond basic tool adoption toward technical excellence such as implementing Schema Markup while policymakers like MDEC should provide targeted "AI-Readiness" training rather than general digitalization grants (Rejón-Guardia et al., 2025; Yang et al., 2022).

References

Abdul Malik, S., Zakaria, N., & Othman, S (2025) Digital marketing in MSMEs: A focus on challenges and opportunities in Johor. *International Journal of Digital Business*.

Abu Jaish, A., Murdipi, R., Razak, D. A., & Jaish, M. A. (2023) The impact of digitalization towards the sustainability of Malaysian SMEs: The dynamic capabilities perspective. *Journal of Sustainability Science and Management, 18*, 154–172.

Aggarwal, P., Murahari, V., Rajpurohit, T., Kalyan, A., Narasimhan, K., & Deshpande, A. (2024) GEO: Generative engine optimization. *Proceedings of the 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD '24),* 12 pages.

Bakashaba, R., & Bindeeba, D. S. (2025) Beyond market penetration: Leveraging brand capital for competitive advantage in digitally driven SMES in resource-constrained settings. *Journal of Innovation and Entrepreneurship*, 14.

Chen, M. L., Wang, X., Chen, K., & Koudas, N. (2025) Generative engine optimization: How to dominate AI search. *Journal of Digital Discovery and Analytics*.

Daoud, M. K., Sharabati, A. A., Samarah, T., & et al. (2024) Optimizing online visibility: A comprehensive study on effective SEO strategies and their impact on website ranking. *Journal of Infrastructure, Policy and Development,* 8, 4860.

Elkhatibi, Y., & Boussedra, F. (2025) Impact of artificial intelligence on SEO and online visibility. In *Artificial Intelligence and Business Transformation*. IGI Global.

Enshassi, M., Nathan, R. J., Soekmawati, S., & et al. (2025) Unveiling barriers and drivers of AI adoption for digital marketing in Malaysian SMEs. *Digital Business*, 5, 100094.

Haq, F. u., Suki, N. M., Zaigham, H., & et al. (2025) Exploring AI adoption and SME performance in resource-constrained environments: A TOE–RBV perspective. *Pakistan Journal of Commerce and Social Sciences*, 19.

Hoo, W. C., Chong, K. L., Aw, Y. C., Sigar, D. T., Zulkifli, Z. K. B., & Jomitol, J. (2023) Impact of search engine optimization dimensions on SME companies using online promotion in Malaysia. *WSEAS Transactions on Business and Economics*, 20, 998–1007.

Juma'at, E. J., Mohamad, N., & Sani, A. M. (2025) The determinants of AI marketing tools adoption among SMEs in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 15.

Kaur, K., & Kumar, S. (2024) Resource-based view and SME internationalization: A systematic literature review of resource optimization for global growth. *Management Review Quarterly*, 74, 55–88.

Lüttgenau, F., Colic, I., & Ramírez-González, G. (2025) Beyond SEO: A transformer-based approach for reinventing web content optimisation. *Proceedings of the AI in Marketing Research Symposium*.

Ma, L., Qin, J., Xu, X., & Tan, Y. (2025) When content is Goliath and algorithm is David: The style and semantic effects of generative search engine. *Information Systems Research*.

Ocran, G., Yusuf, S. O., Owusu, P., & et al. (2024) AI-driven business analytics for SMEs: Unlocking value through predictive and prescriptive analytic. *World Journal of Advanced Research and Reviews*, 21, 150–165.

Rejón-Guardia, F., Molinillo, S., & Anaya-Sánchez, R. (2025) Generative engine optimization. In R. Ladhari, *Encyclopedia of artificial intelligence in marketing* (pp. 1-8). Springer.

Samet, U. (2026) A GEO-first framework: Integrating search visibility, sentiment, and digital authority for organic growth in the AI era. *World Journal of Advanced Research and Reviews*, 29, 0152.

Yang, M., Jaafar, N., Al Mamun, A., & et al. (2022) Modelling the significance of strategic orientation for competitive advantage and economic sustainability: The use of hybrid SEM–neural network analysis. *Journal of Innovation and Entrepreneurship*, 11.

Ziakis, C., & Vlachopoulou, M. (2024) Artificial intelligence's revolutionary role in search engine optimization. *Strategic Innovative Marketing and Tourism*, 439–446.