

# Behavioural Barriers to Sustained Digital Marketing Use among ASEAN Micro-Entrepreneurs: A Systematic Review

Nurezali Osman<sup>1</sup>, Rohaida Basiruddin<sup>2</sup>, Ida Shafira Anoar Ibrahim<sup>3</sup>

<sup>1</sup>Azman Hashim International Business School, Universiti Teknologi Malaysia, 54100 Kuala Lumpur, Malaysia, <sup>2</sup>Azman Hashim International Business School, Universiti Teknologi Malaysia, 54100 Kuala Lumpur, Malaysia, <sup>3</sup>Ezentra Consulting Services, Bandar Kinrara, Puchong 47100 Selangor, Malaysia

Corresponding Author Email: nurezali@graduate.utm.my

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## Abstract

Despite the acknowledged benefits of digital marketing, its use among ASEAN micro-entrepreneurs remains sporadic. Current scholarship disproportionately frames this phenomenon as an initial "adoption" issue, even though it is equally important to address the critical "adoption-continuance gap" where uptake fails to evolve into a routinised practice. This Systematic Literature Review synthesises the behavioural barriers hindering Sustained Digital Marketing Use (SDMU). Adhering to the PRISMA 2020 guidelines, 28 empirical studies published between 2021 and 2025 were rigorously analysed using an eight-code deductive framework. The synthesis reveals that SDMU is constrained by a complex interplay of factors: a "capability ceiling" driven by skill deficits and algorithmic complexity; psychological inertia stemming from low self-efficacy and perceived risk as well as habit fragility, which prevents the normalisation of digital routines. The study establishes SDMU as a distinct post-adoption construct involving continuity, routinisation and practice depth. Consequently, the findings suggest that policy interventions must pivot from generic digital literacy training to targeted mechanisms that scaffold habit formation, reduce cognitive load and bolster confidence, ensuring micro-entrepreneurs' ability to navigate the transition from episodic trial to sustainable digital marketing usage.

**Keywords:** Micro-Entrepreneurs, Digital Marketing, Sustained Use, Habit Formation, Behavioural Barriers, ASEAN

## Introduction

Across the ASEAN region, micro-enterprises serve as a fundamental and dominant economic unit. Built and led by micro-entrepreneurs, these owner-centric entities typically operate where business and personal boundaries are blurred and inextricably linked. Micro-

enterprises act as "one-man shows", centralising decision-making and execution capacity solely in the owner themselves (Che Omar et al., 2025). These kinds of situations usually leave the firm exposed to individual resource constraints and susceptible to operational bottlenecks. To enhance operational efficiency and continuity, digital marketing has been identified as a critical mechanism for upgrading enterprise capabilities (Diatmika & Rahayu, 2025; Phengkona, 2021).

Despite its advantages, the uptake of digital tools among micro-entrepreneurs remains uneven and episodic (Nurliza et al., 2025). According to Hidayat et al. (2025), as more micro-entrepreneurs acknowledge and adopt digital marketing, structured support will be the game-changer to overcome its short-term use. The owner-dependent nature of these micro-enterprises signifies that sustained execution is constantly threatened by competing operational demands and limited implementation capacity (Anindita et al., 2025; Saringkhan & Chienwattanasook, 2024).

Theoretically, a significant gap exists in the current literature which predominantly frames outcomes as "adoption" or initial acceptance (Bhattacharjee, 2001; Limayem et al., 2007). Jasperson et al. (2005) emphasised that this perspective fails to adequately capture the challenge of "continuance", where the primary hurdle is not starting digital marketing, but embedding it into a routinised, day-to-day practice. To address this "adoption-continuance" gap, this study synthesises the behavioural barriers that hinder Sustained Digital Marketing Use (SDMU) among micro-entrepreneurs in the ASEAN region.

Unlike one-off adoption, SDMU is defined by continuity, routinisation and practice depth, reflecting a shift from optional usage to normalised operational routines (Gimin et al., 2024; Siswanto & Dolah, 2023). Essentially, this review operationalises SDMU as a post-adoption construct. It uses continuity/consistency, routinisation/embeddedness, and practice depth as the minimum classification properties for distinguishing sustained use from initial adoption. These properties are then applied as the synthesis lens to interpret how behavioural and capability constraints interact to shape whether micro-entrepreneurs maintain digital marketing as a routine practice over time (Bhattacharjee, 2001; Jasperson et al., 2005; Limayem et al., 2007).

### *Aims and Objectives*

This systematic literature review contributes by re-operationalising digital marketing success in micro-enterprise settings from initial adoption to post-adoption continuance, which remains under-captured when outcomes are framed primarily as acceptance or first-time use (Bhattacharjee, 2001; Jasperson et al., 2005; Limayem et al., 2007). Addressing this adoption–continuance gap, the review synthesises the behavioural barriers that hinder SDMU among ASEAN micro-entrepreneurs.

Unlike one-off adoption, this review seeks to clarify SDMU as a post-adoption construct, defined by continuity, routinization and practice depth. These properties are considered the minimum classification criteria for distinguishing sustained practice from episodic uptake (Gimin et al., 2024; Siswanto & Dolah, 2023).

By applying the criteria as a synthesis lens to interpret how behavioural and capability constraints interact, the review unfolds an eight-code deductive barrier framework to support extraction across heterogenous SDMU studies namely: (1) ATT (Attitudinal Resistance & Low Perceived Value), (2) CLX (Complexity & Cognitive Load), (3) HAB (Habit Fragility), (4) MOT (Motivation & Commitment), (5) PRIO (Resource Scarcity & Prioritisation), (6) RSK (Risk, Trust & Uncertainty), (7) SEF (Low Self-Efficacy) and (8) SKL (Skills & Capability Gaps). Through this, the review helps explain why sustained use of digital marketing breaks down in micro-enterprise contexts.

## **Literature Review**

### *Micro-Entrepreneurs and Digital Marketing*

Micro-entrepreneurs are typically owner–managers of micro-enterprises characterised by low sales turnover, limited capital investment, small asset size and typically fewer than five employees (ASEAN Secretariat, 2025; OECD, 2023; World Bank Group, 2020). They also constitute informal, owner-centric structures in which business and personal domains are inherently related (Che Omar et al., 2025; Wardana et al., 2024). Consequently, when owners take full charge of decision-making and execution, the firms are limited to mere routine execution (Che Omar et al., 2025; Nurliza et al., 2025; Suyanto et al., 2023).

Amid resource constraints, accessible and cost-effective digital innovations are increasingly recognised as practical mechanisms for upgrading enterprise capabilities (Suyanto et al., 2023). This enables firms to respond with agility towards dynamic market shifts (Fu et al., 2024; Gimin et al., 2024). Hidayat et al. (2025) found that microenterprises' receptivity for digital tools ultimately drives their incremental business growth.

Based on empirical evidence, digital marketing has been recognised as a critical capability for micro-enterprises. Among the advantages linked to its use are improvements in operational efficiency (Fu et al., 2024; Muanmeevit & Pankham, 2025), business performance (Hairudinor & Rusidah, 2023; Munawar et al., 2024; Supriaddin et al., 2025; Zahara et al., 2022) and competitiveness within emerging market conditions (Nuamthong & Parnkam, 2024; Yuliawati et al., 2024).

Digital tools can also extend market reach, enhance brand visibility and improve customer access beyond local catchments (Hidayat et al., 2025; Santos et al., 2024). In rural and resource-constrained enterprises, digital means are described as socio-economic lifelines during periods of restricted mobility, enabling continued customer access when physical channels are disrupted (Abdul Rashid et al., 2021; Megat Tajudin et al., 2021; Suyanto et al., 2023).

However, uptake and effective utilisation are frequently irregular because micro-entrepreneurs face persistent digital capability limitations (Hidayat et al., 2025; Nurliza et al., 2025; Wardana et al., 2024) and resource scarcity (Abdul Rashid et al., 2021; Anindita et al., 2025; Yelfiarita et al., 2025). The owner-dependent nature of micro-enterprise operations also constrains time, attention and the capacity to implement (Anindita et al., 2025; Saringkhan & Chienwattanasook, 2024; Siswanto & Dolah, 2023).

Accordingly, this review synthesises behavioural and capability-related barriers that shape post-adoption, SDMU among micro-entrepreneurs within ASEAN, with attention to whether use becomes stable and routinised rather than episodic.

### *Digital Marketing Adoption Versus Continuance*

In digital marketing and information systems research, outcomes were predominantly framed as adoption, operationalised as an “initial acceptance” (Bhattacharjee, 2001), the “adoption decision” (Jasperson et al., 2005) and “first-time use” aimed at acceptance (Limayem et al., 2007). For micro-entrepreneurs, adoption is often characterised by a short trial rather than a lasting marketing capability (Hidayat et al., 2025; Supriaddin et al., 2025) due to owner-operator constraints frequently limiting follow-through and ongoing execution capacity (Che Omar et al., 2025; Megat Tajudin et al., 2021). Continuance (post-adoption use) was conceptually distinct from adoption, focusing on whether digital marketing activity was maintained over time and became sufficiently embedded to shape day-to-day marketing practice (Bhattacharjee, 2001; Jasperson et al., 2005; Limayem et al., 2007).

To avoid exceedingly broad interpretations, SDMU was treated as a post-adoption construct and operationalised in terms of three minimum properties evident across empirical studies. First, SDMU entailed continuity and consistency reflected in repeatable usage patterns and regular platform activity rather than episodic bursts (Delone & McLean, 2003; Limayem et al., 2007; Yuliawati et al., 2024). Second, SDMU entailed routinisation and embeddedness whereby digital marketing shifted from an optional add-on to a normalised element of everyday marketing work and operational routines (Gimin et al., 2024; Jasperson et al., 2005; Siswanto & Dolah, 2023). Third, SDMU entailed practice depth with usage extending beyond basic presence into sustained customer interaction, feature extension and progressive competency accumulation (Delone & McLean, 2003; Jasperson et al., 2005; Santos et al., 2024; Supriaddin et al., 2025). These properties functioned as the review’s classification lens during data extraction and synthesis. Henceforth, studies that reported only intention, initial trial or one-off campaign activity were treated as adoption-focused. In contrast, studies that evidenced continuity, routinisation, and/or practice depth were coded as reflecting SDMU.

### *Behavioural and Capability Barriers*

Building on the adoption–continuance distinction, this review conceptualised constrained post-adoption digital marketing use as an implementation and maintenance challenge in which micro-entrepreneurs recognised potential value yet struggled to translate intentions into repeatable action under everyday operating pressures (Bhattacharjee, 2001; Limayem et al., 2007). Since marketing activity in micro-enterprises was usually carried out by the owner-operator rather than delegated, sustained execution was closely linked to individual capability and remained highly exposed to competing operational and decision-making demands (Che Omar et al., 2025; Wardana et al., 2024). Barriers were treated as interacting constraints that restricted enactment, persistence and routinisation, consistent with post-adoption perspectives emphasising ongoing reinforcement rather than one-off adoption decisions (Jasperson et al., 2005).

First, capability-related barriers captured competence deficits that limited the execution of core tasks. This domain was coded primarily as SKL (Skills & Capability Gaps)

when studies evidenced limited digital literacy or technical knowledge constraints that hindered optimization (Hidayat et al., 2025; Wardana et al., 2024). It was coded as CLX (Complexity & Cognitive Load) when the constraining mechanism was the perceived difficulty of understanding or using the innovation (Fu et al., 2024).

Second, psychological and belief-related barriers captured the drivers of persistence. SEF (Low Self-Efficacy) was applied where evidence indicated low confidence or anxiety (Bandura, 1977). RSK (Risk, Trust & Uncertainty) was coded when entrepreneurs navigated challenges related to legal regulations (Maskur et al., 2024) or expressed concerns regarding system security and trust in digital platforms (Nopianti et al., 2025; Phengkona, 2021). MOT (Motivation & Commitment) captured low drive or diminished effort when perceived returns were low (Ajzen, 1991).

Third, maintenance and constraint-related barriers captured conditions that disrupted routinisation. PRIO (Resource Scarcity & Prioritisation) was applied when digital marketing was deprioritised due to financial shortages, restricted cash flows or pressure to sustain livelihoods (Abdul Rashid et al., 2021; Megat Tajudin et al., 2021). HAB (Habit Fragility) captured the instability of routine and relapse after initial uptake (Limayem et al., 2007).

## **Methods**

This SLR followed the PRISMA 2020 guideline (Page et al., 2021) to enhance rigour, reproducibility and protocol-guided decision-making, thereby reducing selection bias and strengthening auditability (Kitchenham et al., 2009). The review is structured into four phases: (1) search strategy based on the PICO framework, (2) screening and selection, (3) quality assessment and (4) data extraction and synthesis.

### **Phase 1: Search strategy**

#### *The PICO Framework*

To ensure the search strategy precisely targets the review objectives, the keywords and eligibility criteria were derived from the PICO framework (Population, Intervention/Exposure, Comparison and Outcome) specified for this review (McKenzie et al., 2019). The population scope is strictly defined as micro-entrepreneurs, informal business owners and sole proprietors operating within ASEAN countries. In terms of interventions or exposure, the study examines specific behavioural barriers, such as low self-efficacy, habit disruption and cognitive overload that hinder the use of digital marketing. The comparison element involves examining differences between high-sustainers and low-sustainers or distinct operational contexts such as urban versus rural environments, where applicable. Ultimately, the outcome of interest is SDMU, manifested through continuance intention, routine formation and post-adoption consistency.

#### *Information Sources*

To capture frontier knowledge relevant to the digital economy, the search was strictly limited to Scopus and Web of Science (WoS). These databases were selected because they remain the principal sources of citation data, distinguished by their rigorous indexing of bibliographic references and their significant interdisciplinary coverage (Mongeon & Paul-Hus, 2016).

*Search Strings*

The search utilised Boolean operators (AND, OR) to systematically combine four primary keyword clusters representing the core components of the research framework: the population (micro-entrepreneurs), the technological context (digital marketing), the outcome (sustained use and habit formation) and the determinants (barriers and behavioural factors). The exact search strings executed in this SLR are as per Table 1 below:

**Table 1**  
*Search Strings*

<b>Database</b>	<b>Search String</b>
<b>Scopus</b>	TITLE-ABS-KEY( (microentrepreneur* OR "micro entrepreneur*" OR microenterprise* OR "micro enterprise*" OR microbusiness* OR "micro business*" OR MSME* OR SME* OR "small business*" OR "small enterprise*" OR entrepreneur* OR "owner-manager*" OR "owner operator*") AND ("digital marketing" OR "online marketing" OR "internet marketing" OR e-marketing OR emarketing OR "social media marketing" OR "digital promotion" OR "online promotion" OR "digital advertising" OR "online advertising" OR "content marketing" OR "mobile marketing") AND (continu* OR sustain* OR "post-adoption" OR "post adoption" OR routin* OR habit* OR "continued use" OR "ongoing use" OR "long-term use" OR persistence OR retention OR "regular use") AND (barrier* OR obstacle* OR challenge* OR constraint* OR hinder* OR inhibit* OR "behavio?r*" OR "self-efficacy" OR motivation OR attitude* OR trust OR distrust OR "perceived risk" OR anxi* OR complex* OR skill* OR competence OR literacy) ) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English"))
<b>Web of Science</b>	TS=( (microentrepreneur* OR "micro entrepreneur*" OR microenterprise* OR "micro enterprise*" OR microbusiness* OR "micro business*" OR MSME* OR SME* OR "small business*" OR "small enterprise*" OR entrepreneur* OR "owner-manager*" OR "owner operator*") AND ("digital marketing" OR "online marketing" OR "internet marketing" OR e-marketing OR emarketing OR "social media marketing" OR "digital promotion" OR "online promotion" OR "digital advertising" OR "online advertising" OR "content marketing" OR "mobile marketing") AND (continu* OR sustain* OR "post-adoption" OR "post adoption" OR routin* OR habit* OR "continued use" OR "ongoing use" OR "long-term use" OR persistence OR retention OR "regular use") AND (barrier* OR obstacle* OR challenge* OR constraint* OR hinder* OR inhibit* OR behavio?r* OR "self-efficacy" OR motivation OR attitude* OR trust OR distrust OR "perceived risk" OR anxi* OR complex* OR skill* OR competence OR literacy)) AND DT=(Article) AND LA=(English)

*Note: While the context was ASEAN, the initial search remained broad to capture relevant theoretical papers, with the geographical filter applied during the screening phase.*

**Phase 2: Screening and Selection**

*Inclusion and Exclusion Criteria*

To maintain the highest standard of evidence, this SLR establishes strict quality and contextual filters. A key methodological decision is restricting empirical research to ensure findings are based on observed data rather than theoretical conjecture. The complete criteria are detailed in Table 2.

Table 2

*Inclusion and Exclusion Criteria*

Criterion	Inclusion	Exclusion
Context (Region)	Studies focusing on ASEAN or comparable developing economies (e.g., the Global South) are relevant to Malaysia.	Studies focused exclusively on advanced Western economies (USA/EU) with distinct infrastructure contexts.
Population	Micro-enterprises, informal sector, sole proprietorships.	SMEs exceeding micro-scale thresholds, large corporations, Multinational Corporations (MNCs), or general consumer studies.
Focus	Behavioural barriers, sustained use and post-adoption routines.	Purely technical engineering papers (e.g., algorithm design) or initial adoption only.
Study Type	Empirical studies (Quantitative, Qualitative, or Mixed methods) utilising primary or secondary data.	Conceptual papers, systematic reviews, editorials, book chapters, and opinion pieces.
Language	English.	Non-English publications.
Timeline	2016 – 2025.	Published before 2016.

*Selection Process*

The selection of studies strictly adhered to the PRISMA 2020 guidelines, encompassing four distinct stages to ensure transparency and reproducibility. In the identification phase, the initial search across Scopus and WoS yielded 188 records (Scopus: 117; WoS: 71). To ensure data integrity, these citations were exported into a master Microsoft Excel register containing standardised metadata fields, including ID, title, year, abstract, and DOI. A rigorous, multi-layered manual deduplication process was then executed within Excel, involving composite matching of titles and DOIs, followed by secondary checks for DOI-only and title-only similarities, and concluding with a line-by-line manual verification to resolve inconsistencies. This meticulous data cleaning process resulted in the removal of 56 duplicate records, leaving 132 unique documents to advance to the screening phase.

Subsequently, the titles and abstracts of these 132 unique records were screened against the pre-defined PICO criteria. During this stage, 89 articles were excluded as they clearly fell outside the research scope, such as studies focusing on large corporations, purely technical engineering aspects, or non-business contexts. The remaining 43 articles were sought for a comprehensive full-text eligibility assessment.

During this critical appraisal, 15 articles were excluded based on specific exclusion criteria. The primary reasons for exclusion were: (a) geographical mismatch (n=7), where the study context was not within ASEAN or the data could not be separated from non-ASEAN samples; (b) population mismatch (n=2), where participants did not meet the micro-entrepreneur definition; (c) focus mismatch (n=3), as the studies lacked sustained use or post-adoption variables; (d) scope mismatch (n=1), where the study did not focus on digital marketing; (e) methodological mismatch (n=1), being a non-empirical study; and (f) language barriers (n=1), where the full text was not available in English. Finally, a set of 28 empirical articles that satisfied all methodological and contextual criteria was selected for the data extraction and synthesis procedure described in the following section.

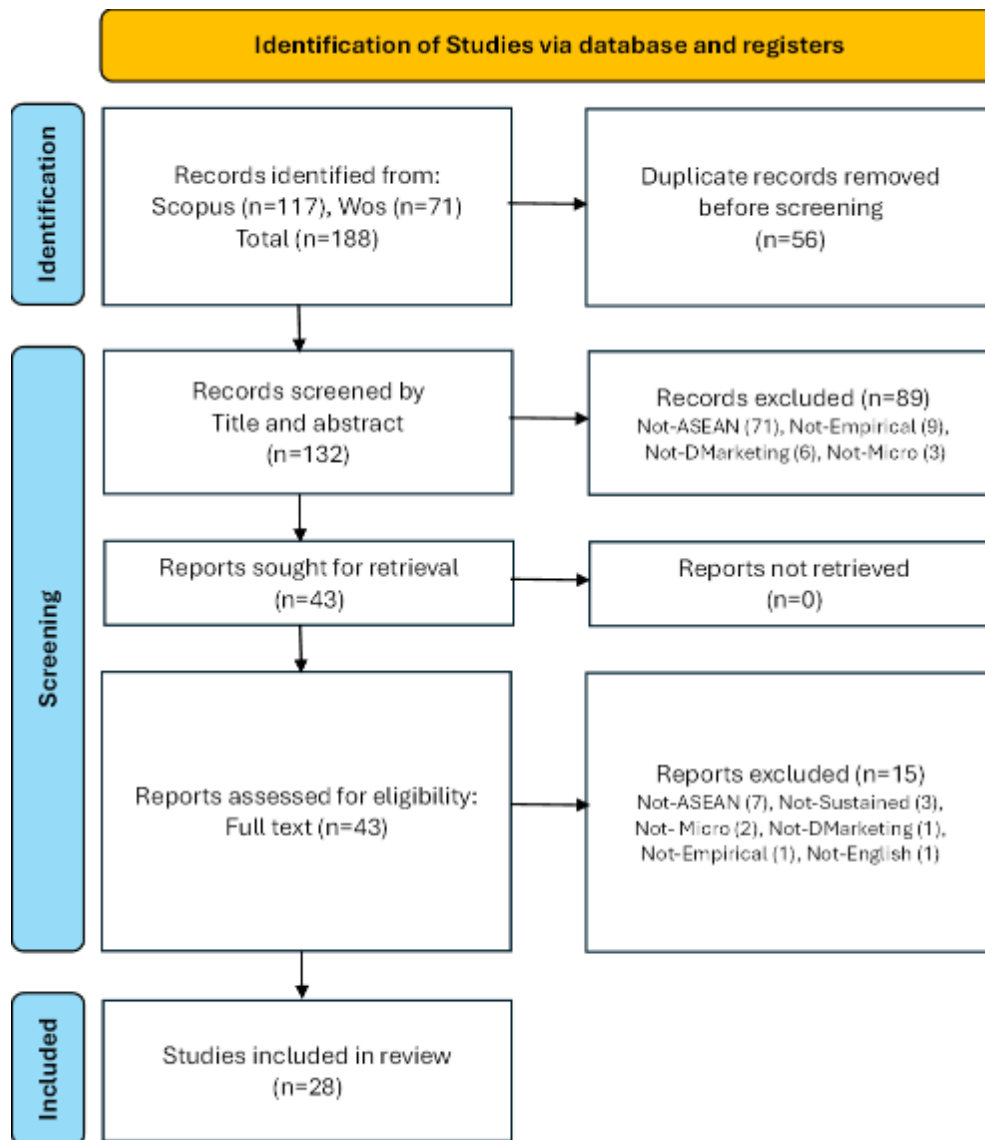


Figure 1: PRISMA 2020 flow diagram

### Phase 3: Quality Assessment

To ensure the robustness of the synthesis, the 28 selected articles underwent a content-specific quality appraisal. Adapted from the protocols of Abouzahra et al. (2020) and Kitchenham et al. (2009), this assessment evaluated the internal validity and rigour of each study using six specific criteria:

- QA1: Is the research purpose regarding digital adoption clearly stated?
- QA2: Is the micro-entrepreneurial context clearly defined?
- QA3: Is the study methodology (sampling and data collection) transparent?
- QA4: Are the behavioural barriers and sustained use concepts clearly defined?
- QA5: Is the data analysis rigorous and supported by evidence?
- QA6: Are the limitations of the study explicitly acknowledged?

Each article was evaluated against these criteria using a ternary scoring system: Yes (1 point), Partly (0.5 points), and No (0 points). The total quality score ranged from 0 to 6.

This quantitative assessment ensured that only methodologically sound studies contributed to the final synthesis.

#### **Phase 4: Data Extraction and Synthesis**

##### *Deductive Coding Scheme*

A deductive coding framework (Appendix A) was applied to extract behavioural barriers consistently across the included studies. Evidence was coded into eight pre-defined categories (ATT, CLX, HAB, MOT, PRIO, RSK, SEF, SKL), and any barrier that did not align clearly with these categories was recorded under an 'Other/Emergent' label to avoid forced misclassification.

##### **Thematic Analysis**

Thematic synthesis was applied to integrate findings across the included studies (Thomas & Harden, 2008). Extracted evidence that had been coded deductively (ATT, CLX, HAB, MOT, PRIO, RSK, SEF, SKL) were synthesised into higher-order themes to map barriers to sustained digital marketing usage and to explain the transition gap from initial adoption to routinised practice (Jasperson et al., 2005; Limayem et al., 2007).

#### **Results**

##### *Quality Assessment Analysis*

Across the 28 included studies (see Appendix B for the included studies and quality appraisal), the evidence base is predominantly Indonesian (n=20) and quantitative (n=15), with quality ratings concentrated in the medium (n=17) to high (n=11) range. Notwithstanding this generally adequate methodological profile, a substantive construct–outcome gap persists regarding the SDMU. High-quality quantitative models such as those by Bernando and Ray (2024) and Fu et al. (2024) often operationalise outcomes as business sustainability or adoption intention rather than the routinisation and maintenance of digital marketing behaviour, a pattern also evident in other high-quality intention-focused work (e.g., (Yelfiarita et al., 2025)). At the lower end of the scoring spectrum, studies such as (Maskur et al., 2024) and (Siswanto & Dolah, 2023) prioritise normative/legal or branding deliverables rather than empirically modelling behavioural barriers to continuance. While the literature offers well-specified adoption and performance-oriented models, it rarely isolates continuance as a distinct dependent variable, a gap this study will address by operationalising maintenance as behaviourally and analytically separate from initial uptake and general performance.

### Geographical Distributions

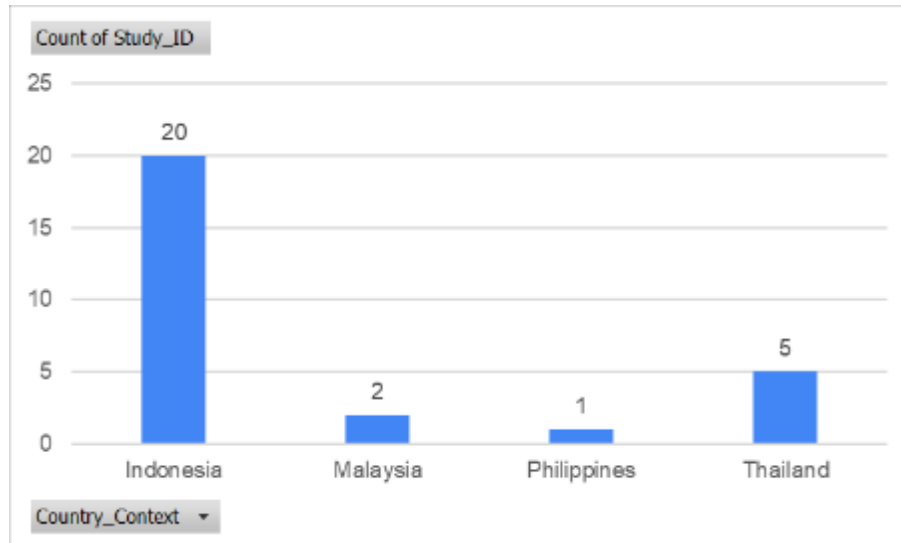


Figure 2: Geographic distribution of included studies

Figure 2 shows the geographic distribution of the included studies, with the majority originating from Indonesia ( $n=20$ ; 71.4%), followed by Thailand ( $n=5$ ; 17.9%), Malaysia ( $n=2$ ; 7.1%) and the Philippines ( $n=1$ ; 3.6%). This distribution reveals a notable imbalance in which Indonesian contexts disproportionately shape current understandings of SDMU among ASEAN micro-entrepreneurs. The scarcity of studies from other ASEAN countries shows that significant differences and diverse realities of micro entrepreneurs in the region remain underexplored. Consequently, broadening the geographical spread of future research would help develop a more balanced and comprehensive evidence base for the region.

### Temporal Distribution

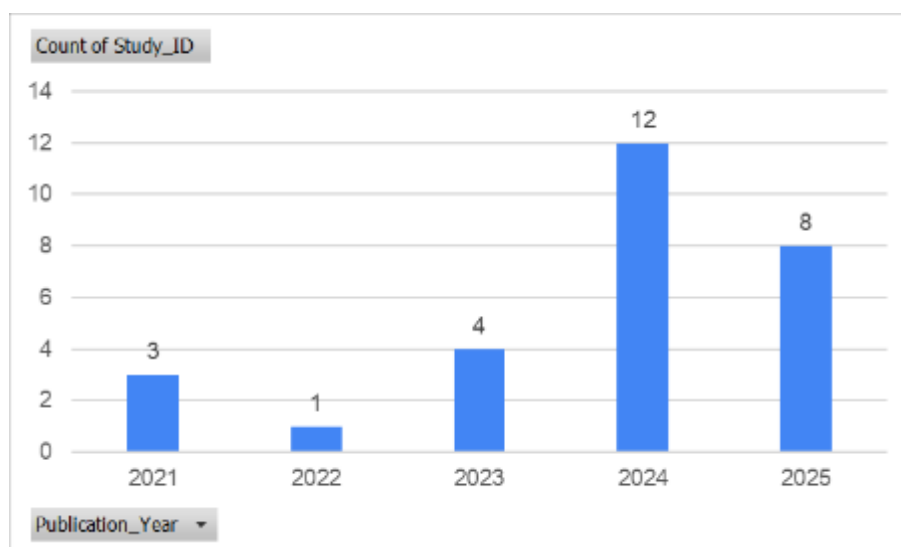


Figure 3: Temporal distribution of included studies

Figure 3 shows the temporal distribution of the 28 included studies. Although the search covered 2016–2025, all included studies were published only between 2021 and 2025. Publication activity began modestly in 2021 and 2022, then grew noticeably in 2023, peaked

in 2024 and remained high in 2025. This upward trend reflects increasing regional interest in the post-pandemic period, indicating that SDMU has only recently gained traction as a scholarly and policy-relevant topic. This shows that research on behavioural barriers and SDMU among ASEAN micro-entrepreneurs is still emerging.

### *Research Methodology*

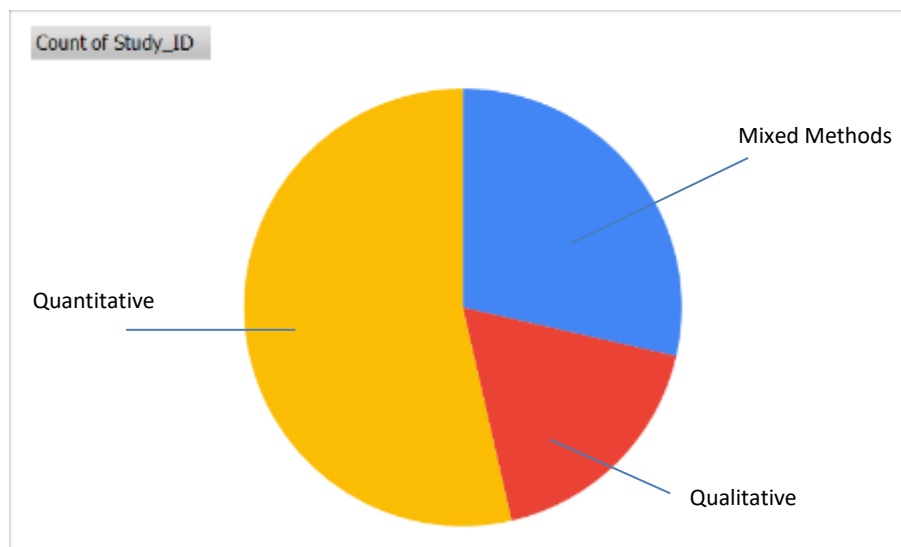


Figure 4: Research methodology of included studies

Figure 4 shows the research methodology of the included studies. Quantitative studies ( $n=15$ ; 53.5%) dominate the evidence, which is mainly based on cross-sectional surveys analysed using SEM-PLS, CFA, regression, or descriptive statistics. Second is mixed-methods designs ( $n=8$ ; 28.6%) that integrate surveys, interviews and observations to capture behavioural patterns and contextual nuances. Qualitative studies ( $n=5$ ; 17.9%) were the least, conducted via thematic, grounded theory, and case-based analyses. Sampling across the dataset is predominantly non-probability, with sample sizes ranging from small interviews ( $n\approx 7-25$ ) to extensive surveys ( $n>500$ ).

### *Behavioural Barrier to Sustained Digital Marketing Use*

Using the eight-code deductive framework (ATT, CLX, HAB, MOT, PRIO, RSK, SEF, SKL) as the analytic lens, the included studies were synthesised to identify the relative prevalence and co-occurrence of behavioural barriers shaping SDMU. This SLR reported each barrier using two complementary indicators: (1) study prevalence (the number of unique studies mentioning the barrier) and (2) mention frequency (the total count of coded mentions). This dual-indicator approach distinguished barriers that were widely observed across included contexts from those discussed in greater depth within particular settings (Anindita et al., 2025; Fu et al., 2024). Table 3 summarises the distribution across the eight coded barrier categories.

Table 3

*Behavioural barrier prevalence and mention frequency*

Barrier code	Studies n (% of 28)	Mentions n (% of 182)	Mentions per study (avg.)
SKL	27 (96.4%)	70 (38.5%)	2.59
ATT	17 (60.7%)	23 (12.6%)	1.35
RSK	14 (50.0%)	18 (9.9%)	1.29
CLX	14 (50.0%)	16 (8.8%)	1.14
HAB	13 (46.4%)	17 (9.3%)	1.31
MOT	11 (39.3%)	18 (9.9%)	1.64
SEF	11 (39.3%)	13 (7.1%)	1.18
PRIO	6 (21.4%)	7 (3.8%)	1.17

*Capability Deficits and Perceived Complexity*

SKL constraints showed the highest prevalence in 27 studies (96.4%), with 70 mentions, indicating that capability limitations are consistently foregrounded in the SDMU. SKL barriers such as limited digital literacy (Bernardo & Ray, 2024; Maskur et al., 2024; Nurliza et al., 2025; Suyanto et al., 2023; Yelfiarita et al., 2025) and inadequate mastery of information and communication technology were described frequently (Abdul Rashid et al., 2021; Saringkhan & Chienwattanasook, 2024; Sinrungtam et al., 2023; Wardana et al., 2024), illustrated by findings that “literacy in interaction with computers or other technological means is still in the second level category” (Remmang et al., 2024). Several studies extend this beyond basic platform use to strategic execution, including setting “explicit business goals” (Anindita et al., 2025), guidance to create a business plan to implement appropriate digital marketing (Zahara et al., 2022) and “ability to measure the return on investment” (Santos et al., 2024).

CLX constraints emerged in 14/28 studies (50.0%) with 16 mentions, suggesting that SDMU is also shaped by the cognitive challenge of managing features, algorithms, and content decisions. Studies reinforce this view, with (Anindita et al., 2025) describing social media marketing as a “very complex science” and Santos et al. (2024) highlighting the “fast-paced changes in social media algorithms”. These complexities, alongside the “perceived challenges associated with cutting-edge technologies” (Nopianti et al., 2025), collectively contribute to hesitation in maintaining SDMU.

*Mindset, Psychological Readiness, and Self-Efficacy*

ATT barriers were reported in 17 studies (60.7%), with 23 mentions, reflecting psychological constraints beyond technical access. These are often framed as a preference for conventional methods, such as “deep-rooted traditions” (Handoko et al., 2024) and having “relied solely on traditional channels” (Suyanto et al., 2023). Others highlight a defensive mindset, including “reluctance to adopt new technologies” (Munawar et al., 2024) and a resistant mindset where changing behaviours proves challenging (Saringkhan & Chienwattanasook, 2024).

MOT-related barriers were reported in 11 studies (39.1%) with 18 mentions, indicating their high salience when valid incentives are absent, as exemplified by Remmang et al. (2024), who found that training participation was less than 5 times per year. This is evidenced by findings that some entrepreneurs are “less motivated to be productive”

(Handoko et al., 2024) or perceive digital adoption as “not immediately necessary” (Yelfiarita et al., 2025). In other cases, the barrier stems from a “low awareness of the importance” of strategic planning (Zahara et al., 2022) or a tendency to “undervalue the benefits” of digital tools due to resource constraints (Fu et al., 2024).

SEF constraints were identified in 11 studies (39.1%), with 13 mentions, reflecting deep-seated anxieties about capability. These are described as “technological apprehensions” (Fu et al., 2024) or specific “anxieties when dealing with technology” (Suyanto et al., 2023). The lack of confidence is explicit, with entrepreneurs reporting that they “remain less confident” in their skills (Nurliza et al., 2025) or feel “inadequately trained to manage” social media marketing effectively (Santos et al., 2024). Others express fear of “public comparison and potential failure” (Yelfiarita et al., 2025), highlighting the vulnerability of digital exposure.

#### *Resource Prioritisation and Perceived Risk*

PRIO constraints were least prevalent in 6 studies (21.4%) with seven mentions but provide important context into scarcity-driven decision-making. Evidence indicates that challenges lie in the struggle to manage available resources efficiently (Diatmika & Rahayu, 2025; Megat Tajudin et al., 2021) and the “limitless nature of time”, which makes it difficult for entrepreneurs to rest (Suyanto et al., 2023). Others highlight the need for a “balanced approach” to prevent strategic imbalance (Nuamthong & Parnkam, 2024).

RSK barriers were more widely identified in 14 studies (50.0%), with 18 mentions, and captured anxieties about compliance, privacy, and outcomes. These include entrepreneurs being “concerned about government taxation” when selling online (Saringkhan & Chienwattanasook, 2024) and facing a lack of understanding regarding “data protection”, “intellectual property rights”, and “legal regulations” (Maskur et al., 2024). Ethical concerns also arise, specifically regarding “ethics and customer privacy” (Muanmeevit & Pankham, 2025). Furthermore, operational uncertainty remains a barrier, with some entrepreneurs feeling hesitant due to uncertainty about outcomes (Munawar et al., 2024) or experiencing “suspense” regarding unknown future business tests (Megat Tajudin et al., 2021). Collectively, these barriers suggest that SDMU is shaped not only by capability but also by perceived safety and confidence in the cost–benefit over time.

#### *Habit Fragility and Behavioural Maintenance*

HAB constraints were reported in 13 studies (46.4%) with 17 mentions, indicating that SDMU often depends on behavioural routines rather than one-off adoption. Studies highlight the struggle to establish regularity, such as the failure to “post text, photos, and videos at regular intervals” (Sinrungtam et al., 2023) and the observation of “varying levels of commitment” among entrepreneurs (Santos et al., 2024). Evidence also suggests that digital marketing often fails to persist due to “constantly inconsistent” implementation (Siswanto & Dolah, 2023). It is also due to business actors facing “difficulty maintaining business continuity” (Zahara et al., 2022). Furthermore, some businesses “continue to operate manually” without innovation (Handoko et al., 2024) or adopt “static digital marketing approaches” (Hidayat et al., 2025), reinforcing the difficulty of shifting from traditional routines to dynamic digital engagement.

## Discussion

In this SLR, we have profiled the behavioural barriers that hinder SDMU among micro-entrepreneurs. By synthesising evidence from 28 studies, our findings indicate that an interacting set of capability, psychological, and maintenance-related constraints shapes SDMU. We interpret these patterns through behavioural theory and the contemporary ASEAN micro-enterprise landscape, while recognising that the included evidence base is dominated by cross-sectional designs and therefore supports interpretive, rather than causal, conclusions.

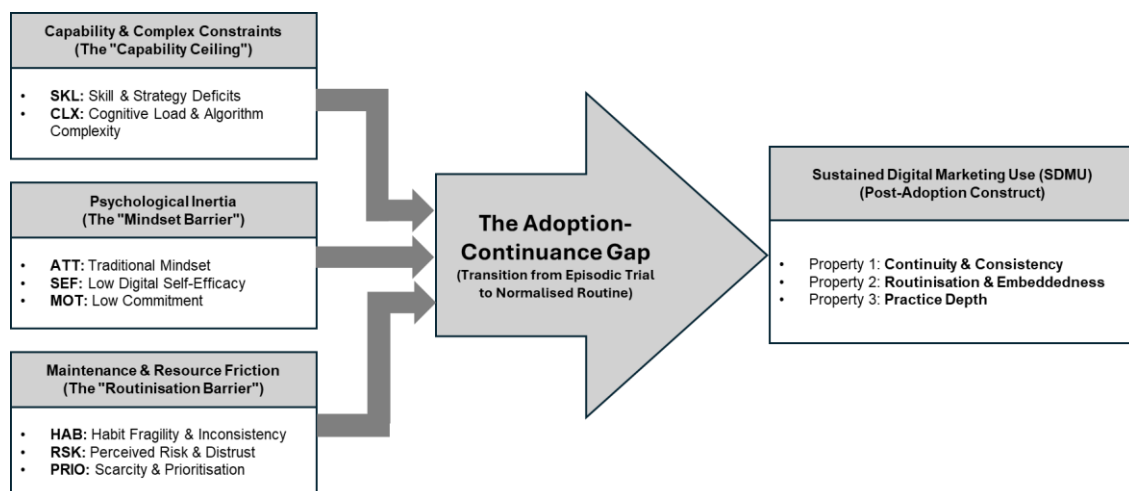


Figure 5: Conceptual framework of behavioural barriers to SDMU

Figure 5 illustrates the conceptual framework derived from the synthesis of the 28 included studies. It conceptualises SDMU not as a binary adoption decision but as a post-adoption outcome defined by continuity, routinisation and practice depth.

### *The Capability–Complexity Paradox*

SKL-related barriers were near-universal across the evidence base (27/28 studies), indicating that capability constraints remain the most consistently reported obstacle to SDMU. We found that the literature does not position this as a deficit in basic digital literacy alone; instead, studies frequently describe limitations in strategic execution and advanced competencies, such as data-informed decision-making and campaign optimization (Santos et al., 2024; Zahara et al., 2022).

This capability challenge co-occurs with CLX, where entrepreneurs report difficulty keeping pace with changing platform features and algorithmic dynamics (Anindita et al., 2025; Yelfiarita et al., 2025). The evidence suggests a “capability ceiling” in which initial uptake may be possible but SDMU is constrained when required competencies shift from operational use to strategic adaptation. This implies that training and support frameworks may need to evolve towards fostering higher-level “algorithmic fluency” and applied analytics capability.

### *Psychological Inertia and the “Traditional Mindset”*

ATT barriers were widely reported (17/28 studies), often described as a preference for familiar offline routines and a sceptical orientation towards digital channels (Handoko et al., 2024; Suyanto et al., 2023). However, we observed that these narratives appear less like

categorical rejection and more like an effort–benefit evaluation, in which the perceived cognitive burden outweighs expected welfare or sales gains, leading entrepreneurs to rationally revert to conventional methods (Fu et al., 2024; Yelfiarita et al., 2025).

SEF may amplify this inertia, as limited confidence in digital capabilities reduces persistence when outcomes are uncertain (Yelfiarita et al., 2025; Zahara et al., 2022). This is consistent with established self-efficacy mechanisms regarding behavioural performance and persistence (Bandura, 1977). The co-occurrence of ATT and SEF suggests that psychological readiness must be treated as a parallel constraint to technical access in efforts to SDMU.

#### *Risk, Trust, and the Cost of Digitalisation*

RSK barriers were also prominent (14/28 studies), highlighting that the barriers in ASEAN are not purely infrastructural but profoundly trust-based. Studies repeatedly report that legal uncertainties, concerns over data protection and broader deficits in ecosystem trust are significant inhibitors of deeper digital engagement (Maskur et al., 2024; Muanmееvit & Pankham, 2025; Supriaddin et al., 2025).

PRIO reflects scarcity-driven decision-making where the challenge is less about access and more about the inefficient management of limited resources (Diatmika & Rahayu, 2025). This includes the struggle to balance business continuity with the time-intensive demands of online engagement (Suyanto et al., 2023). Together, these findings suggest that SDMU is partially contingent on reducing perceived downside risk and lowering ongoing operational frictions, not merely improving skills.

#### *Habit Fragility and Behavioural Maintenance*

HAB constraints were frequently reported (13/28 studies), indicating that SDMU often fails during the maintenance phase rather than at initial adoption. Studies describe inconsistent routines and difficulty sustaining a regular digital presence (Anindita et al., 2025; Santos et al., 2024). This pattern aligns with technology continuance and habit perspectives, where repeated behaviour becomes stable only when it is routinised and less cognitively demanding (Bhattacharjee, 2001; Lally et al., 2010; Limayem et al., 2007).

Our review suggests that without routine scaffolds, daily content decisions and platform management demands remain effortful (Suyanto et al., 2023), increasing the likelihood of discontinuation (Zahara et al., 2022).

#### **Conclusion**

Our synthesis proposes that SDMU is best understood as a behavioural process shaped by co-occurring capability, confidence, perceived risk and routine-maintenance constraints. In practice, this implies that policy interventions across the region should couple skills development with confidence-building and routine scaffolding while addressing the trust and cost frictions that discourage sustained engagement. While the generalisability of these findings is limited by the concentration of studies in specific ASEAN contexts and by reliance on self-reported measures, we believe this review provides a robust foundation for future longitudinal research and behavioural tracking to better capture SDMU trajectories.

**Contribution of the Review**

This review offers four theoretical and contextual contributions to the literature on digital marketing use by ASEAN micro-entrepreneurs. First, it re-operationalises SDMU as a post-adoption construct rather than a simple indicator of initial acceptance, defining it in terms of continuity, routinisation and practice depth. This extends post-adoption research by showing that the central challenge for micro-entrepreneurs is not merely whether they adopt digital marketing, but whether they can embed it into repeated, meaningful and progressively competent business practice (Bhattacharjee, 2001; Jaspersen et al., 2005; Limayem et al., 2007). Second, the review contributes an eight-code behavioural barrier framework — ATT, CLX, HAB, MOT, PRIO, RSK, SEF and SKL — that can serve as a reusable analytical tool for future studies examining why digital marketing use weakens after initial uptake. Third, the synthesis advances the idea of a “capability ceiling” as a derived construct, where basic adoption may be possible but sustained use remains constrained when micro-entrepreneurs lack the strategic, analytical and adaptive capabilities required to manage platform complexity. The synthesis further identifies habit fragility as an under-theorised barrier, suggesting the need for deeper integration of habit-formation theory (Lally et al., 2010) into digital entrepreneurship research. Fourth, the review provides context by mapping the uneven ASEAN evidence base: the included studies are heavily concentrated in Indonesia (n=20) and Thailand (n=5), with no studies originating from Vietnam, Cambodia, Laos, Brunei, Myanmar or Singapore. Additionally, all 28 articles fall within the pandemic and post-pandemic period of 2021–2025. This pattern positions SDMU as an emerging regional research issue and highlights the need for broader ASEAN-based empirical inquiry.

**Limitations and Recommendations for Future Research**

While our review provides a comprehensive synthesis of behavioural barriers, we acknowledge several limitations that offer pathways for future inquiry. Firstly, the evidence base is predominantly composed of cross-sectional, self-reported data. While these studies are invaluable for identifying perceived barriers, they are limited in their ability to capture the causal trajectories of SDMU. We recommend that future research adopt longitudinal designs or objective behavioural tracking (e.g., social media analytics) to observe how digital habits fluctuate or decay over time.

Secondly, we observed a geographic concentration in specific ASEAN regions, particularly Indonesia and Thailand. This imbalance implies that the diverse realities of micro-entrepreneurs in other ASEAN economies remain underexplored. Essentially, future studies should broaden their geographical scope to include underrepresented countries in the region to determine whether these behavioural barriers remain consistent across diverse regulatory and cultural landscapes.

Finally, as HAB emerged as a significant yet under-theorised barrier, we suggest that future work should deeply integrate habit-formation theories with technology-continuance models to explore the "routinisation" phase of digital entrepreneurship to ensure sustained use of digital marketing towards business resilience and growth.

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