Technology and Investment, 2026, 17(1), 18-28
https://www.scirp.org/journal/ti
ISSN Online: 2150-4067
ISSN Print: 2150-4059

Generative AI as a Strategic Enabler for Global Start-Ups Entering Southeast Asian Markets: Capabilities, Illustrative Cases, and a Proof-of-Concept Framework

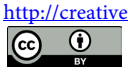
Mostafa Rahmany

Buckinghamshire New University, Buckinghamshire, United Kingdom
Email: GlobalMostafa@Gmail.com

How to cite this paper: Rahmany, M. (2026). Generative AI as a Strategic Enabler for Global Start-Ups Entering Southeast Asian Markets: Capabilities, Illustrative Cases, and a Proof-of-Concept Framework. *Technology and Investment, 17,* 18-28.
https://doi.org/10.4236/ti.2026.171003

Received: December 8, 2025
Accepted: January 10, 2025
Published: January 13, 2025

Copyright © 2026 by author(s) and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/



Open Access

Abstract

Generative artificial intelligence (GenAI) is increasingly used by technology start-ups to reduce the cost, time, and organizational complexity of entering culturally and institutionally diverse markets. Southeast Asia is a particularly relevant context because it combines rapid digital adoption with high cross-country variation in language, culture, logistics, and regulation. This paper positions GenAI not only as an operational automation tool, but as a strategic enabler that can reshape internationalization choices by accelerating market learning, lowering the liability of foreignness, and enabling rapid, scalable localization across business functions. The study is conceptual: it synthesizes GenAI capability literature with established market-entry theories (e.g., CAGE distance, the Uppsala learning process, and dynamic capabilities) and uses four illustrative cases (Indonesia, Vietnam, Malaysia, and Singapore) drawn from publicly available secondary sources. Building on this synthesis, the paper proposes a GenAI-enabled market-entry framework and presents a proof-of-concept (PoC) simulation for a hypothetical e-commerce start-up entering Thailand. The PoC results reported in Section 7 are projected outcomes of a hypothetical scenario (not empirical findings) and are intended to illustrate how GenAI could change time-to-market and localization costs relative to a resource-backed organization (RBO), defined here as an established incumbent with dedicated localization and market-entry resources.

Keywords

Generative AI, Southeast Asia, International Market Entry, Start-Ups, Localization, Dynamic Capabilities, AI Governance, Strategic Expansion

1. Introduction

Technology start-ups are increasingly attracted to Southeast Asia due to strong growth in digital commerce, a large and mobile-first consumer base, and the presence of regional innovation ecosystems. However, market entry is complex because the region exhibits substantial linguistic, cultural, and institutional heterogeneity. For resource-constrained start-ups, these factors increase the cost and uncertainty of internationalization, especially when traditional entry approaches rely on manual research, localized hiring, and outsourced translation or content production.

This paper addresses the following research problem: how can GenAI capabilities be translated into strategic choices that meaningfully alter start-ups' market-entry options in Southeast Asia, rather than merely improving operational efficiency? The paper contributes: 1) a theoretically grounded mapping from GenAI capabilities to market-entry strategy mechanisms, 2) a structured set of illustrative cases that highlight plausible pathways and measurement considerations, and 3) a PoC market-entry framework and hypothetical simulation to demonstrate how a GenAI-enabled entry stack could be configured.

The paper is intentionally positioned as a conceptual contribution with illustrative evidence. It does not claim causal effects or generalizable performance estimates; instead, it clarifies mechanisms, proposes testable propositions, and identifies measurement and governance issues for future empirical research (Rohendi, 2023; ASEAN Secretariat, 2022).

2. Theoretical Framing: Why GenAI Can Be a Strategic Enabler

International market entry and entrepreneurial internationalization research emphasizes learning, uncertainty reduction, and the need to overcome distance and "liability of foreignness." In Southeast Asia, distance is not only geographic but also cultural, administrative/regulatory, and linguistic. These forms of distance typically increase coordination costs, slow the feedback loops needed for product-market fit, and require localized knowledge that start-ups may lack.

Three theoretical lenses are particularly useful for framing GenAI as a strategic enabler:

- CAGE distance and localization strategy: GenAI can reduce perceived cultural and linguistic distance by generating localized content, customer interactions, and documentation at lower marginal cost.
- Uppsala internationalization (learning-by-doing): GenAI can accelerate experiential learning cycles by enabling faster market sensing, A/B testing of localized propositions, and rapid iteration of customer-facing assets.
- Dynamic capabilities: GenAI can strengthen "sensing" (market intelligence), "seizing" (rapid go-to-market experimentation), and "reconfiguring" (continuous localization and process redesign) by automating or augmenting knowledge-intensive tasks.

Under these lenses, GenAI's strategic value is not limited to operational efficiency. It can expand the feasible set of entry modes for start-ups (e.g., earlier direct-to-consumer entry, faster piloting across multiple countries) and shift decision-making from slow, high-commitment investments toward rapid, data-informed experimentation (Ghemawat, 2001; Johanson & Vahlne, 1977; Johanson & Vahlne, 2009; Oviatt & McDougall, 1994; Barney, 1991).

3. Research Approach and Materials

The manuscript adopts a conceptual research design supported by illustrative multiple-case evidence. Specifically:

1) Literature synthesis: Prior work on GenAI capabilities and governance is synthesized and then linked to market-entry theories commonly used in international business and entrepreneurship.

2) Illustrative cases (secondary sources): Four Southeast Asian start-ups (Sampingan, Topica, StoreHub, Carro) are discussed using publicly available secondary materials (e.g., industry reports, case write-ups, and company communications). These cases are included to illustrate mechanisms and plausible metrics, not as primary evidence of effectiveness.

3) Proof-of-concept (hypothetical) simulation: A structured PoC scenario is presented for a hypothetical e-commerce start-up entering Thailand. Assumptions are stated explicitly, and reported "results" are projections intended to show how measurement could be performed.

Limitations: Because the cases rely on secondary sources, reported performance figures should be treated as indicative and context-dependent. Future work should validate these mechanisms using primary data (e.g., interviews, field experiments, product analytics, and regulatory compliance audits).

4. GenAI Capabilities Relevant to Market Entry

GenAI refers to models-typically large language models (LLMs) and multimodal foundation models-that generate novel text, images, audio, video, or code. For market entry, five capability clusters are especially relevant:

4.1. Scalable Natural Language Generation and Translation

Drafting and adapting marketing assets, in-app copy, help-center articles, onboarding flows, and contract templates in local languages with tone and register control.

4.2. Market Sensing and Competitive Intelligence

Extracting and summarizing signals from public sources (e.g., reviews, forums, regulatory announcements, and competitor sites) and converting them into actionable insights.

4.3. Rapid Prototyping and Product Iteration

Generating code snippets, UI copy, test cases, and product documentation to

compress development cycles and support faster experimentation.

4.4. Multilingual Customer Operations

Chatbot-based self-service and agent-assist systems that enable 24/7 support, faster response times, and consistent quality across languages.

4.5. Synthetic Data Generation

Producing privacy-preserving datasets for early testing, stress testing, and model training in low-data environments, while requiring careful governance to avoid leakage, bias, or misleading distributions.

Strategic implication: When combined, these capabilities reduce the marginal cost of "learning" a new market and enable start-ups to test multiple localized value propositions before making irreversible investments (Brown et al., 2020; Lee, 2023; Estevez et al., 2025; Gupta, 2022; Zhang & Arora, 2023; Liu & Chang, 2024; Roche et al., 2023).

5. Strategic Applications across the Market-Entry Process

GenAI can be deployed across the market-entry lifecycle:

- Pre-entry (opportunity sensing): automated collection and summarization of local consumer pain points, competitor positioning, and regulatory constraints.
- Entry design (localization and compliance): rapid generation of localized landing pages, ads, onboarding flows, FAQs, and draft compliance artifacts, with human review and local legal validation.
- Post-entry scaling (operations and growth): multilingual customer service, continuous localization of product content, and accelerated iteration based on user feedback.

In all stages, human oversight remains critical. GenAI is best viewed as a capability amplifier that changes speed and scale, while strategic accountability remains with founders and managers (Estevez et al., 2025; Gupta, 2022).

6. Illustrative Cases from Southeast Asia (Secondary-Source Evidence)

The following cases are presented in a consistent analytical structure: 1) context and entry challenge, 2) GenAI intervention, 3) measurement approach and reported outcomes, and 4) strategic insight and evidence limitations. The numbers reported were not independently audited in this study; they are included to illustrate what metrics practitioners track and how future research could validate them.

6.1. Indonesia: Sampingan-LLM Chatbot for Onboarding and Support

Context and challenge: Sampingan is an Indonesian platform connecting gig

workers with employers. As the user base grows, onboarding and FAQ handling can become support-intensive, particularly when users prefer informal Bahasa Indonesia and mobile-first channels.

GenAI intervention: The company reportedly deployed a GPT-class LLM chatbot (e.g., via a commercial API or a hosted equivalent) to provide: 1) guided onboarding in Bahasa Indonesia, 2) automated responses to common questions, and 3) handoff to human agents for complex issues. This design pattern is consistent with "self-service + escalation" architectures common in GenAI customer operations.

Measurement and reported outcome: A commonly used metric for this type of intervention is agent time saved per resolved ticket (or the percentage of tickets resolved without human intervention). The secondary-source figure cited in the original manuscript suggests approximately 35% savings in support-team time. To interpret such a figure rigorously, a baseline period (e.g., several weeks pre-deployment) and a post-deployment observation window should be stated, along with ticket volumes, resolution definitions, and whether the chatbot was used as full automation or as agent-assist.

Strategic insight and limitations: For start-ups, chat-based GenAI can reduce the operational burden of multilingual onboarding, allowing earlier market scaling without proportional hiring. However, secondary-source performance figures should be treated as indicative; future studies should report datasets, time windows, and quality outcomes (e.g., CSAT, escalation rates, and error types) (Fitriani, 2024).

6.2. Vietnam: Topica-GenAI-Assisted Curriculum Localization and Content Production

Context and challenge: Vietnam's EdTech market is competitive and language-sensitive; content must align with national curricula, local learning styles, and regional dialect preferences. Producing and updating large volumes of learning materials creates high fixed costs.

GenAI intervention: The case suggests that GenAI tools were used to draft localized learning content (e.g., lesson explanations, practice questions, quizzes, and summaries) in Vietnamese, with human instructional designers providing review, alignment to learning outcomes, and factual validation. A typical technical stack for this use case combines: 1) an LLM for text generation, 2) retrieval from approved content repositories to reduce hallucination, and 3) templated prompting to ensure consistent pedagogy.

Measurement and reported outcome: The manuscript reports a 60% faster curriculum development cycle. A transparent measurement approach would define the unit of analysis (e.g., time per lesson module), the baseline process (e.g., instructor-authored drafting + editing), and the scope (new content vs. updates). Quality controls such as error rates, learner outcomes, and educator review time are also important.

Strategic insight and limitations: In market entry, rapid localization of educational content can allow an entrant to test multiple segments (K-12, exam prep, professional courses) with smaller teams. Yet, because the evidence is secondary, the result should be treated as illustrative and should be validated with primary operational data (Vietnam Foundation, 2025).

6.3. Malaysia: StoreHub-Where the Generative Component Fits in Personalization

Context and challenge: StoreHub provides retail technology where personalization can improve conversion and retention, but traditional recommendation engines often focus on predictive ranking (i.e., estimating which products a customer will buy) rather than generating customer-specific content.

GenAI intervention (distinguishing generative vs. predictive): In a GenAI-enhanced personalization stack, predictive models can still perform ranking and segmentation, while the *generative* component adds value by producing: 1) personalized promotional messages in natural language (SMS/WhatsApp/email), 2) multiple creative variants for rapid A/B testing, 3) short product explanations and bundles ("why this item fits you"), and 4) multilingual localization of campaigns. This is conceptually different from classic collaborative-filtering or gradient-boosted ranking models because the output is not only a score, but new customer-facing content.

Measurement and reported outcome: The manuscript reports that a three-month A/B test after launch was associated with 28% higher repeat purchases and 17% higher cart conversions. For transparency, such reporting should specify the experiment design (test vs. control definition), sample size, channels used, and whether uplift was measured as absolute percentage points or relative percentage change.

Strategic insight and limitations: If the generative layer reduces the cost of running localized promotional experiments, it can improve market learning and allow faster adaptation to Malaysian consumer segments. As with the other cases, the figures should be interpreted as secondary-source, context-specific signals that motivate more rigorous future evaluation (StoreHub, 2024).

6.4. Singapore: Carro-GenAI for Narrative Reporting and Listing Creation

Context and challenge: Online used-car platforms depend on trust, accurate condition information, and persuasive yet compliant listings. Producing inspection reports and listings at scale is labor-intensive, and cross-market expansion requires localization of terminology and consumer expectations.

GenAI intervention (illustrative, grounded in public reporting): Public reporting indicates that Carro is investing heavily in AI across functions including sales and car inspections. A plausible GenAI application in this setting is to convert structured inspection inputs (and, where available, technician notes or images)

into standardized narrative condition reports and listing drafts, as well as to summarize free-text customer feedback and personalize offers. Technically, this often involves multimodal pipelines (vision models + LLMs) or LLMs that translate structured fields into readable, template-controlled narratives.

Measurement and reported outcome: The manuscript reports that drafting and publishing content could be completed in 40% less time than manual writing. A rigorous measurement approach would define the baseline workflow (e.g., minutes per listing), the dataset size (number of vehicles), and quality checks (complaint rates, refunds/returns, or post-sale dispute frequency).

Strategic insight and limitations: For market entry, automated narrative generation can help maintain consistent quality across languages and accelerate supply-side onboarding. However, because listing content directly affects consumer trust and legal exposure, human review and standardized templates remain essential (Reuters, 2025).

7. Proof-of-Concept Market-Entry Framework and Hypothetical Simulation

This section provides a structured framework and a hypothetical PoC simulation for a start-up entering Thailand's e-commerce market. The objective is to demonstrate how GenAI tools could be configured, what measurements would look like, and what outcomes might plausibly be expected. The results below are projections from a hypothetical scenario and should not be interpreted as empirical findings.

7.1. GenAI-Enabled Entry Framework

The framework links GenAI capabilities to four market-entry modules (see Table 1):

Table 1. PoC simulation design (hypothetical).

PoC component	GenAI tool pattern	Primary output	Example metric
Thai landing pages + ads	LLM with style guide + human review	Localized web copy and creative variants	Cycle time (days) and conversion uplift
Social listening in Thai	LLM summarization + topic clustering	Weekly insight briefs and risk flags	Time to insight; decision actions logged
Synthetic consumer dataset	Synthetic tabular data + privacy checks	Early-stage test data for MVP flows	Coverage vs. target segments; privacy risk review
Multilingual chatbot	Self-service + escalation; RAG with policy docs	Thai/English support and onboarding	Containment rate; CSAT; escalation accuracy

- Sense: continuous market intelligence (reviews, competitor offers, regulation monitoring).

- Localize: rapid multilingual localization of product, marketing, and support content with cultural adaptation.
- Build: accelerated prototyping and experimentation (landing pages, onboarding flows, A/B tests, MVP features).
- Engage: multilingual customer operations (chatbots, agent assist, personalized campaigns) with governance controls.

7.2. Hypothetical PoC Simulation: Thailand E-Commerce Entrant

Scenario: A foreign start-up plans to enter Thailand with a consumer e-commerce MVP. The entrant has limited local headcount and must localize the product, go-to-market assets, and support operations within a short runway.

PoC configuration (hypothetical):

- Auto-generated Thai landing pages using a GPT-class LLM with a Thai style guide and human review.
- Thai-language sentiment and topic monitoring of forums and social media, summarized weekly.
- A synthetic consumer dataset for early funnel testing and personalization prototyping, reviewed for privacy risks.
- A Thai/English customer-support chatbot with cultural adaptation and escalation to a small human team.

Projected outcomes over a three-month pilot (hypothetical projections):

- ~50% reduction in time-to-market for initial localized rollout.
- ~35% reduction in localization-related operational costs.
- ~2.3× improvement in early-stage engagement metrics (e.g., activation or onboarding completion), conditional on effective human review and product quality.

Measurement note: In a real deployment, each KPI must be defined precisely (absolute vs. relative change), and results should be compared to a clearly specified baseline (e.g., prior launches without GenAI, or a matched control market).

8. Challenges, Risks, and Ethical Considerations

8.1. Bias, Cultural Appropriateness, and Hallucination Risk

GenAI outputs can reflect biases present in training data and may produce culturally inappropriate content. This risk is amplified in Southeast Asia due to sensitive religious, ethnic, and political contexts. Mitigations include local human review, culturally grounded style guides, and retrieval-augmented generation from approved knowledge bases.

8.2. Data Privacy, Synthetic Data, and Cross-Border Processing

Market entry often requires handling personal data across borders. GenAI systems may introduce new risks: prompt logs can contain personal information; model providers may store data depending on configuration; and synthetic data can still leak attributes if poorly generated. Start-ups should implement privacy-by-design

controls, data minimization, encryption, retention limits, and documented assessments of whether synthetic data preserves privacy while remaining statistically useful.

8.3. Workforce Impacts and Potential Job Displacement

GenAI can change local labor demand by automating parts of translation, content production, and tier-1 customer support. While this can increase productivity, it may also displace certain roles or shift them toward quality assurance, escalation handling, and relationship management. Responsible market entry should include reskilling plans, transparent communication, and monitoring of service quality to avoid "automation without accountability."

8.4. Legal and Governance Uncertainty

AI governance and data protection regimes vary across ASEAN jurisdictions and are evolving. Start-ups should treat compliance as a core capability: maintain audit trails of GenAI outputs, document model and data choices, implement human-in-the-loop controls for regulated content, and consult local legal expertise for sector-specific rules.

8.5. Infrastructure and Talent Gaps

Connectivity and AI talent availability vary across Southeast Asia, which can constrain deployment and monitoring in some contexts. Start-ups should plan for hybrid architectures (cloud + edge), offline fallbacks for customer operations, and ecosystem partnerships for local capability building (Elahi, 2023; Singapore IMDA, 2023; Roche et al., 2023; Yusof, 2023).

9. Strategic Recommendations for Start-Ups

Based on the proposed framework, start-ups considering Southeast Asia entry should:

- Build a "minimum viable entry stack": combine market sensing, localization, and customer operations tooling into a single workflow with measurable KPIs.
- Distinguish automation from augmentation: use GenAI for drafts and first-pass decisions, while keeping humans responsible for final approvals in sensitive contexts.
- Specify the generative layer: clarify whether GenAI generates customer-facing content, internal insights, code, or synthetic data-and define success metrics for each.
- Implement governance early: define acceptable-use policies, data handling rules, and escalation procedures before scaling.
- Partner locally: collaborate with local universities, accelerators, and domain experts for cultural review, compliance interpretation, and talent development.
- Measure responsibly: report baselines, time windows, and quality metrics (e.g.,

CSAT, complaint rates, regulatory incidents) alongside speed/cost improvements.

10. Conclusion

GenAI has the potential to function as a strategic enabler for start-ups entering Southeast Asia by compressing the time and cost of localization, accelerating market learning, and enabling multilingual customer engagement at scale. This paper contributes a theoretically grounded mechanism mapping, a structured set of illustrative cases from secondary sources, and a GenAI-enabled entry framework accompanied by a hypothetical PoC simulation. The findings are conceptual and illustrative rather than empirical; consequently, future research should validate the proposed mechanisms with primary data, including field experiments, longitudinal product analytics, and comparative studies across ASEAN markets. At the practitioner level, the strategic benefits of GenAI will be realized only if start-ups implement strong governance, privacy controls, cultural review processes, and responsible workforce strategies.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

ASEAN Secretariat (2022). *ASEAN Digital Masterplan 2025*. ASEAN.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management, 17,* 99-120. https://doi.org/10.1177/014920639101700108

Brown, T., Mann, B., Ryder, N. et al. (2020). Language Models Are Few-Shot Learners. *Advances in Neural Information Processing Systems, 33,* 1877-1901.

Elahi, B. Z. (2023). Ethics of Generative Models. *AI & Law Journal, 31,* 15-33.

Estevez, M., Ballestar, M. T., & Sainz, J. (2025). Market Research and Knowledge Using Generative AI: The Power of Large Language Models. *Journal of Innovation & Knowledge, 10,* Article 100796. https://doi.org/10.1016/j.jik.2025.100796

Fitriani, W., Nasution, M. I., & Supratikta, H. (2024). Digitalization of Companies Prospects for Process Automation Using RPA and GPT Integration. *Indonesian Development of Economics and Administration Journal, 3,* 44-54. https://doi.org/10.70001/idea.v3i1.209

Ghemawat, P. (2001). Distance Still Matters: The Hard Reality of Global Expansion. *Harvard Business Review, 79,* 137-147.

Gupta, A. I. (2022). Automated Competitor Tracking Using NLP. *IEEE Access, 10,* 45200-45212.

Johanson, J., & Vahlne, J. E. (1977). The Internationalization Process of the Firm—A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies, 8,* 23-32. https://doi.org/10.1057/palgrave.jibs.8490676

Johanson, J., & Vahlne, J. E. (2009). The Uppsala Internationalization Process Model Revisited: From Liability of Foreignness to Liability of Outsidership. *Journal of International Business Studies, 40,* 1411-1431. https://doi.org/10.1057/jibs.2009.24

Lee, J. K. (2023). Generative AI in Southeast Asian Localization. *AI & Society, 39,* 122-140.

Liu, M., & Chang, J. (2024). Sentiment-Aware Design Using Generative AI. *International Journal of Human-Computer Interaction, 39,* 34-50.

Oviatt, B. M., & McDougall, P. P. (1994). Toward a Theory of International New Ventures. *Journal of International Business Studies, 25,* 45-64. https://doi.org/10.1057/palgrave.jibs.8490193

Reuters (2025). Singapore's Carro eyes M&A, Australia Foray Ahead of Potential Dual Listing. *Reuters*.

Roche, C., Wall, P. J., & Lewis, D. (2023). Ethics and Diversity in Artificial Intelligence Policies, Strategies and Initiatives. *AI and Ethics, 3,* 1095-1115. https://doi.org/10.1007/s43681-022-00218-9

Rohendi, A., Asriani, A., & Kharisma, D. B. (2023). Regulation for Startups in Indonesia: Problems and Recommendations. *Cogent Business & Management, 10,* Article: 2276993. https://doi.org/10.1080/23311975.2023.2276993

Singapore IMDA (2023). *AI Governance and Ethics (Guidance Document).* Info-Communications Media Development Authority (IMDA).

StoreHub (2024). AI in Personalization (Case Write-Up). *StoreHub Insights*.

Vietnam Foundation (2025). *Vietnam Ready to Implement AI in Education-Time to Choose the Right Tools*. https://vnfoundation.org/en/vietnam-ready-to-implement-ai-in-education-time-to-choose-the-right-tools/

Yusof, E. N. (2023). Digital Gaps in ASEAN. *Asia Digital Journal, 12,* 100-115.

Zhang, L., & Arora, N. (2023). Rapid Prototyping with GenAI Tools. *Journal of Product Innovation, 41,* 78-93.