EDTECH FOR MARGINALISED LEARNERS IN SOUTHEAST ASIA

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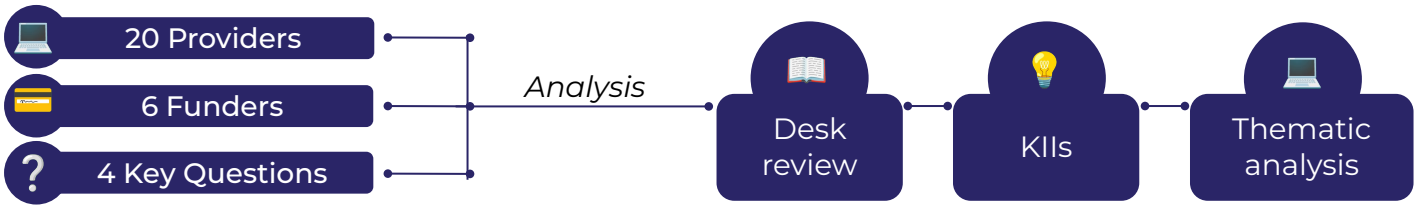
Research methodology

This Landscape Analysis adopted a **mixed-methods approach**, combining a **desk review** with **semi-structured key informant interviews** (KIIs).



The research questions

1. To what extent are existing EdTech solutions within the Southeast Asian region catering to the needs of marginalised learners?
2. To what extent do EdTech providers consider the needs of marginalised learners in their decision-making and design processes?
3. What are the challenges and opportunities regarding the reach and scale of interventions for marginalised learners in Southeast Asia?
4. What key considerations and metrics do funders use to evaluate the potential and success of their investments in supporting EdTech interventions?

Providers profile

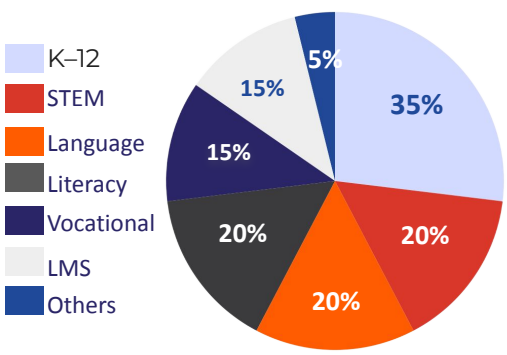
Diverse EdTech providers in Southeast Asia target K–12 learners with foundational literacy and numeracy.

Distribution

60%
Non-marginalised focused

40%
Marginalised focused

Area of focus



Delivery methods

Synchronous learning
- Online platform with live classes
- Offline courses

Blended learning
- Blended learning models

Asynchronous learning
- Content repositories
- Interactive modules
- Digital libraries

Ensuring inclusivity for marginalised learners through data-driven design and development

Southeast Asian EdTech providers incorporate user-centric testing and tailored features in design, regardless of beneficiaries. Multi-stage feedback, localisation, and making adaptations with accessibility in mind address diverse needs and regional challenges and thereby promote inclusive education.

Contextualisation and localisation

Localisation

Providers emphasise localised content that incorporates local languages, dialects, and cultural contexts for enhanced engagement.

Curriculum alignment

Providers align content with national curricula to ensure educational standards and relevance, especially for underserved communities reliant on public education.

Inclusive practices

Human-centred design (HCD)
Focuses on simplified user interfaces, text-based navigation, larger fonts, and single sign-on for users with limited technical skills.

Lightweight applications

Minimise processing demands for compatibility with low-cost devices in low-connectivity areas.

Accessibility features

These are SEND focused, and include adjustable text sizes, brightness controls, closed captions, and audio functions to foster inclusive use of technology.

Multiphase testing methodology

Multi-stage testing validates product relevance across development phases, enabling EdTech providers to iterate based on user insights for enhanced functionality and alignment with needs.

1. **Early-stage user testing**: Identifies pain points and validates initial design.
2. **Beta testing**: Detects bugs and usability issues on a near-final product.
3. **Pilot phase**: Validates effectiveness and scalability in real-world settings.
4. **A/B testing**: Optimises user experience through data-driven comparisons.
5. **Focus group / user interviews**: Gathers in-depth qualitative feedback from specific user segments.

i Despite its strengths, this process demands **significant time, expertise, and resources,** which are often limited.

Design challenges

Teacher quality and recruitment: In Indonesia and Vietnam, teachers employed by EdTech providers exhibit suboptimal quality due to rural–urban disparities in compensation, standards, and certification, compounded by limited access to training in remote areas.

Delivery method constraints: Synchronous models demand reliable infrastructure, excluding rural learners, while self-paced options falter on motivation without support; hybrid approaches require skilled facilitation amid device shortages.

Curriculum localisation gaps: K–12 curricula overlook 21st-century skills and cultural relevance. Localisation is hampered by resource shortages, lack of dialect expertise, and sensitive issues such as gender norms.

Feedback and accessibility barriers: Testing marginalised users is impeded by inaccessibility and a lack of networks; offline designs with SEND features (e.g., text-to-speech) are essential but challenging to implement because of low digital literacy and poor connectivity.

Key Insights

Offline-first for accessibility

Given the widespread issue of unreliable internet connectivity in Southeast Asia, offline-first technology is vital for ensuring educational access for marginalised learners.

User-centred principles

Providers adopt HCD for iterative user-focused design and Universal Design for Learning (UDL) for flexible engagement, presentation, and assessment.

Partnerships for reach, relevance, and evaluation

Collaborations with NGOs, communities, and governments facilitate access, co-creation of culturally relevant solutions, and representative feedback.

Read the complete Landscape Analysis

This report presents the findings of a landscape analysis of EdTech interventions designed for the Southeast Asian context. The analysis aims to understand the extent to which EdTech providers and funders in Southeast Asia address the needs of marginalised learners through their priorities in design, investment, and scaling decisions. To read the full report, go to: /docs.edtechhub.org/lib/SB7G3I83.

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