2022



Kingdom of the Netherlands

Skills Nation
FUTURE OF LEARNING & WORK

SINGAPORE

State of EdTech *Report*

Overview of the education technology landscape and key developments affecting Singapore and Southeast Asia.

Commissioned by the Embassy of the Kingdom of the Netherlands in Singapore.

OVERVIEW

Singapore: State of EdTech Report 2022 provides deep insight into the state of play for the EdTech landscape. While focused on Singapore, the report includes detailed analysis of five neighbouring countries: Indonesia, Malaysia, Philippines, Thailand and Vietnam. Providing a point of reference, the report will be beneficial to EdTech and impact investors in the Netherlands and beyond, EdTech founders, government representatives and business leaders. The report will assist the reader in tracking how EdTech companies within Southeast Asia are moving forward.

The data in this report is from Dealroom, dated January 2022.

Note: selected key findings in this report exclude Emeritus Institute of Management, the EdTech that raised a mega-round in August 2021, to provide a more representative picture of the state of EdTech in the region.

The information in this report is provided on an “as is” basis. This report was produced by Skills Nation in collaboration with Kaizenvest and is subject to change. It has been prepared solely for information purposes over a limited period of time to provide a perspective on the market. It is not intended for investment purposes.

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WHAT IS EDTECH?

Dealroom defines Education Technology (better known as EdTech) as follows: Startups developing tech-enabled solutions with the primary focus of helping an individual to learn or operate better, whether by making learning more affordable, more efficient, more effective, more engaging or a combination of these factors.

The Brookings Institution identifies four ‘comparative advantages’ which EdTech offers which have the potential to complement the work of educators to improve learner outcomes. These comparative advantages are:

- **Scaling up quality instruction:** Technology presents the opportunity to deliver standardised quality content at scale. Pre-recorded quality lessons, distance education and pre-loaded hardware could help to deliver quality at scale
- **Facilitating differentiated instruction:** Technology presents the opportunity to provide a more differentiated learning experience. Computer-adaptive learning and live one-on-one tutoring offer the possibility to provide differentiated support to students
- **Expanding opportunities to practise**: Technology can provide additional opportunities for students to review and practise which is a key learning process and often isn’t given enough attention in class. Technology could allow students to review topics at their own pace through providing practice exercises
- **Increasing learner engagement:** Technology can increase learner engagement with material by using video tutorials for self-paced learning and presenting exercises as games and/or gamifying practice.

Source: https://www.brookings.edu/

KEY FINDINGS

342 EDTECH COMPANIES

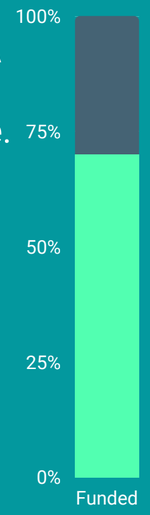
1/3 FUNDED | **2/3** BOOTSTRAPPED OR UN-FUNDED

There are 342 EdTech companies in Southeast Asia (six countries), of which only 34% are funded

Of all the funded SEA EdTech companies, 70% are at seed-stage.

Singapore has two EdTech unicorns.







49% (170) of the EdTech companies are headquartered in Singapore



There is a nearly equal split between the number of EdTech solutions that focus on **child-learning** vs **adult-learning**



...yet over 75% of all capital invested goes to solutions for 3 - 18 year olds

USD 1.4 bn
has been invested in Southeast Asian EdTech companies over the past eight years

USD 6.8 mn
is the average deal size



Tutoring & homework help
Language learning
Test preparation

are the solution types that received the most in equity investment

2021

- showed an increase of **1.7x** in the number of Southeast Asia EdTech investors
- accounted for **25%** of all equity investments in Southeast Asia EdTech over the past eight years



Most investors in Southeast Asia EdTech are from the United States.

The most active regional EdTech investors are EduSpaze (SG), January Capital (SG) and East Ventures (ID/SG/JP).

FOREWORD

Learning is essential to our existence; the information and continued learning nourishes our minds. When we learn new things, it gives us a feeling of accomplishment which, in turn, boosts our confidence in our own capabilities. For me, learning has always been very important. And early on I realized everyone has their own strength and we can't do it alone; we need to work together in teams with different skill sets to succeed in life.

Today, "succeeding in life" has a different meaning, depending on where you are in the world. Financial prosperity, number of friendships, having seen many different countries, good grades in school - the same data may be seen in a different light in different cultures or working environments. That can cause misunderstandings. For me, it is all about the people and what they perceive. The way that school education is approached in a country says a lot about how "success in life" is measured.

The way we learn has changed in many ways, for all ages. We can now learn much faster thanks to customized courses online and adults can choose to learn in groups or as an individual.

Thanks to new innovative technologies such as serious gaming, learning has also become a lot more fun for everyone. Technology has got endless potential for education and learning.

Singapore is a wealthy city-state and education is well funded, as well by the government as by parents but this is not the case for all countries in Southeast Asia. Tech innovations in learning benefit the less wealthy ASEAN countries. Especially after school closures caused by the pandemic, thanks to education technologies learning loss was limited - in some countries more than in others.

Whatever your unique skill, I believe that it is important to also learn to listen as much as sending your own ideas to others. It will create a mix of diverse thoughts that will eventually contribute to your own prosperity and improve the world's connectivity.

Margriet Vonno
Ambassador of the Kingdom of the Netherlands in Singapore



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Ambassador of the Kingdom of the Netherlands in Singapore

Kingdom of the Netherlands

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INTRODUCTION

2021 marked for the education industry, in particular, a fundamental shift in how the world thinks about learning and teaching. Education, traditionally a heavily undercapitalised and under-digitised sector with only 4% of spend going to technology, is now undergoing a fundamental digital transformation. Better learning outcomes are being enabled for children and adults through the use of technology and digital infrastructure.

The COVID-19 pandemic catalysed the adoption of online learning: kids and adults were forced to continue learning and operating from home, adopting new technologies and digital infrastructure to make remote learning as efficient as possible. As a direct result, Education Technology (EdTech) globally has taken flight and a paradigm shift has taken place in our understanding of how learning occurs.

In 2021, the global EdTech sector saw nearly USD 21 billion in equity investment, which is three times pre-pandemic investment levels. The global EdTech industry was valued at USD 89.49 billion in 2020 and is expected to witness a compound annual growth rate (CAGR) of 19.9% from 2021 to 2028.

In this report, we focus on the state of EdTech in Singapore as well as five neighbouring countries: Indonesia, Malaysia, Philippines, Thailand and Vietnam. For context, we provide an overview of each country, looking at population, GDP, and the state of education in general. Accessibility and quality of education are two key topics for Southeast Asia (SEA).

Then, we explore the SEA EdTech start-up scene, providing insight into the number, stage and value of EdTech start-ups in each market covered. We also examine the equity investments trend in SEA EdTech, the best funded EdTech start-ups in the region and the investors behind them.

We distinguish 13 EdTech market segments to provide an overview of the various solution types that EdTech companies offer, and identofy how the focus in this region is set on just a few types.

Finally, three regional domain experts share their insights on the state of EdTech in Southeast Asia: the founder and CEO of Singapore's only home-grown EdTech unicorn, a government representative and the Development Partner for Singapore Education, and an emerging markets institutional investor focused on the future of learning and work.



Lastly, a note on Singapore. It is, by far, the most economically and digitally developed of the six countries in scope of this report. Singapore is known for its high quality and efficient public and private education system, as well as for its favourable environment to launch a start-up. Its unique start-up ecosystem is the reason why there are many successful start-ups based in the country. With its favourable corporate tax system, the Singapore government makes it a very friendly environment for start-ups to catalyse.

The government plays an active role helping start-ups to grow, to connect with corporates for co-innovation programmes, to connect with investors and mentors, and, at the scaling stage, to access markets abroad.

For EdTech start-ups in particular, Singapore has an EdTech accelerator, "EduSpaze". Backed by government agency Enterprise Singapore, EduSpaze is open to EdTech start-ups from the Southeast Asia region.

Additionally, Singapore possesses a tech-savvy and internet-connected population. For all these reasons, many companies whose primary market may be elsewhere in the region, choose to incorporate in Singapore.

1

COUNTRIES IN FOCUS

- SINGAPORE
- INDONESIA
- VIETNAM
- MALAYSIA
- THAILAND
- PHILIPPINES

COUNTRIES IN FOCUS

Singapore, Malaysia, Indonesia,
Vietnam, Thailand & Philippines



Total population: **583** mn

Singapore

POPULATION:
5.7 mn

GDP: USD 379 bn
PER CAPITA: USD 59.8 k

90% INTERNET PENETRATION



ACCESS TO EDUCATION: HIGH

Universal enrolment reached.

QUALITY OF EDUCATION: HIGH

- Singapore scores consistently higher on PISA scores than OECD average
- State of the art digital infrastructure in schools.

IMPACT OF COVID: LOW

No negative impact on students' learning as a result of the pandemic: school closures limited and effective Home Based Learning programmes rolled out.

CAPITAL FLOW INTO EDUCATION

- Government funding: HIGH
- Appetite for private spending: HIGH
- Foreign investment: HIGH.

Sources: World Bank, UNICEF, OECD, World Education Services

Indonesia

POPULATION:
270.6 mn

GDP: 1.1 trn

PER CAPITA: USD 4.1 k

54% INTERNET PENETRATION



ACCESS TO EDUCATION: LOW

4.4m 7 - 18 year old learners are out of school; high number of adolescents not in school or employment; 57% with disabilities out of school.

QUALITY OF EDUCATION: LOW

- PISA scores ~80% of OECD average
- 55% of school leavers have low literacy
- Declining math proficiency.

IMPACT OF COVID: SEVERE

School closures have led to significant learning loss. Online learning solutions are not accessible to everyone due to unequal access to tech and internet.

CAPITAL FLOW INTO EDUCATION

- Government funding: focused on digital skills development
- Appetite for private spending: LOW
- Foreign investment: GROWING.

Sources: World Bank, UNICEF, OECD, World Education Services

Malaysia

POPULATION:
31.9 mn

GDP: USD 364.7 bn
PER CAPITA: USD 11.4 k

89% INTERNET PENETRATION



ACCESS TO EDUCATION: PARTLY LOW

High enrolment in pre-primary and primary but significant drop in secondary; concerns about barriers to inclusion.

QUALITY OF EDUCATION: MEDIUM-LOW

PISA scores ~ 90% of OECD average.

IMPACT OF COVID: SEVERE

Major economic impact due to the pandemic; effective online learning solutions in place.

CAPITAL FLOW INTO EDUCATION

- Government funding: HIGH
- Appetite for private spending: HIGH
- Foreign investment: LOW.

Sources: World Bank, UNICEF, OECD, World Education Services

Vietnam



POPULATION:
96.4 mn

GDP: USD 261.9 bn

PER CAPITA: USD 2.7 k

70% INTERNET PENETRATION



ACCESS TO EDUCATION: MIXED

> 95% enrolment in pre-primary and primary;
> 65% enrolment in upper secondary school.

QUALITY OF EDUCATION: HIGH

PISA scores slightly above OECD average.

IMPACT OF COVID: MILD

Relative short period of school closure and less severe impact on education expected.

CAPITAL FLOW INTO EDUCATION

- Government funding: HIGH
- Appetite for private spending: HIGH
- Foreign investment: GROWING.

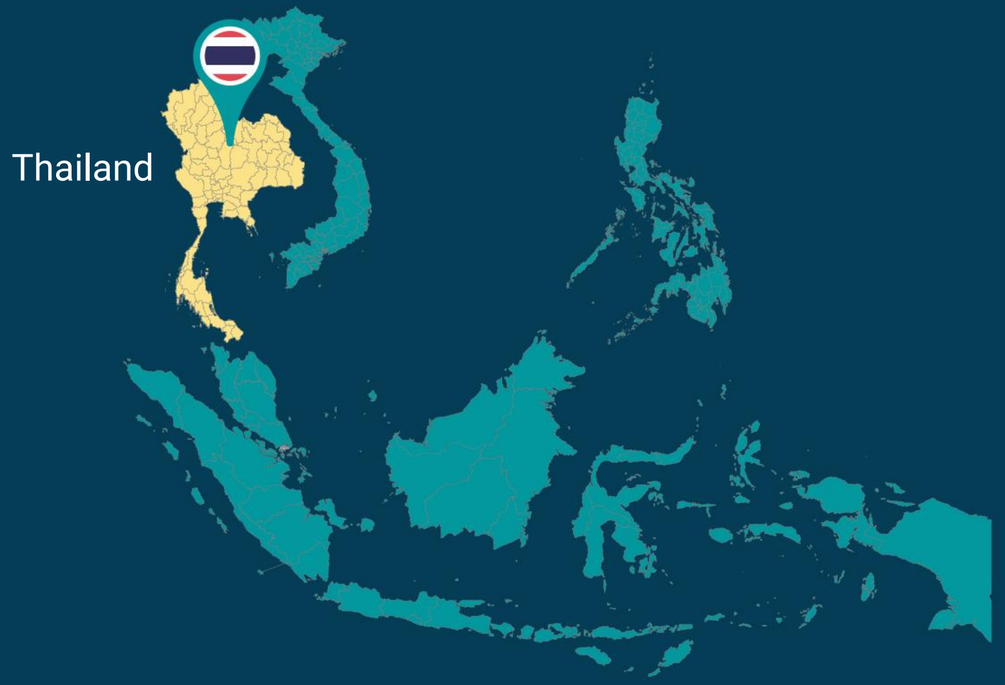
Sources: World Bank, UNICEF, OECD, World Education Services

Thailand

POPULATION:
69.6 MN

GDP: USD 543.5 bn
PER CAPITA: USD 7.8 k

78% INTERNET PENETRATION



ACCESS TO EDUCATION: MEDIUM-LOW

High enrolment in primary but low in pre-primary and secondary school.

QUALITY OF EDUCATION: MEDIUM

- PISA scores ~ 80% of OECD average
- Poor digital infrastructure in schools.

IMPACT OF COVID: MILD

Shorter school closures than in other countries in the region. Remote learning solutions only moderately effective.

CAPITAL FLOW INTO EDUCATION

- Government funding: HIGH
- Appetite for private spending: HIGH.

Sources: World Bank, UNICEF, OECD, World Education Services

Philippines



POPULATION:
108.1 mn

GDP: USD 376.8 bn

PER CAPITA: USD 3.5 k

47% INTERNET PENETRATION

ACCESS TO EDUCATION: PARTLY LOW

High enrolment in pre-primary and primary but significant drop in secondary: 14% (2.8 mn) are not in school. Girls at risk of drop-out.

QUALITY OF EDUCATION: LOW

- PISA scores ~70% of OECD average
- Low teacher quality
- Poor infrastructure in schools.

IMPACT OF COVID: SEVERE

Longest school closures in SEA (> 1 academic year) due to low availability of vaccines. Remote learning solutions mostly ineffective.

CAPITAL FLOW INTO EDUCATION

- Government funding: LOW
- Appetite for private spending: VARYING.

Sources: World Bank, UNICEF, OECD, World Education Services

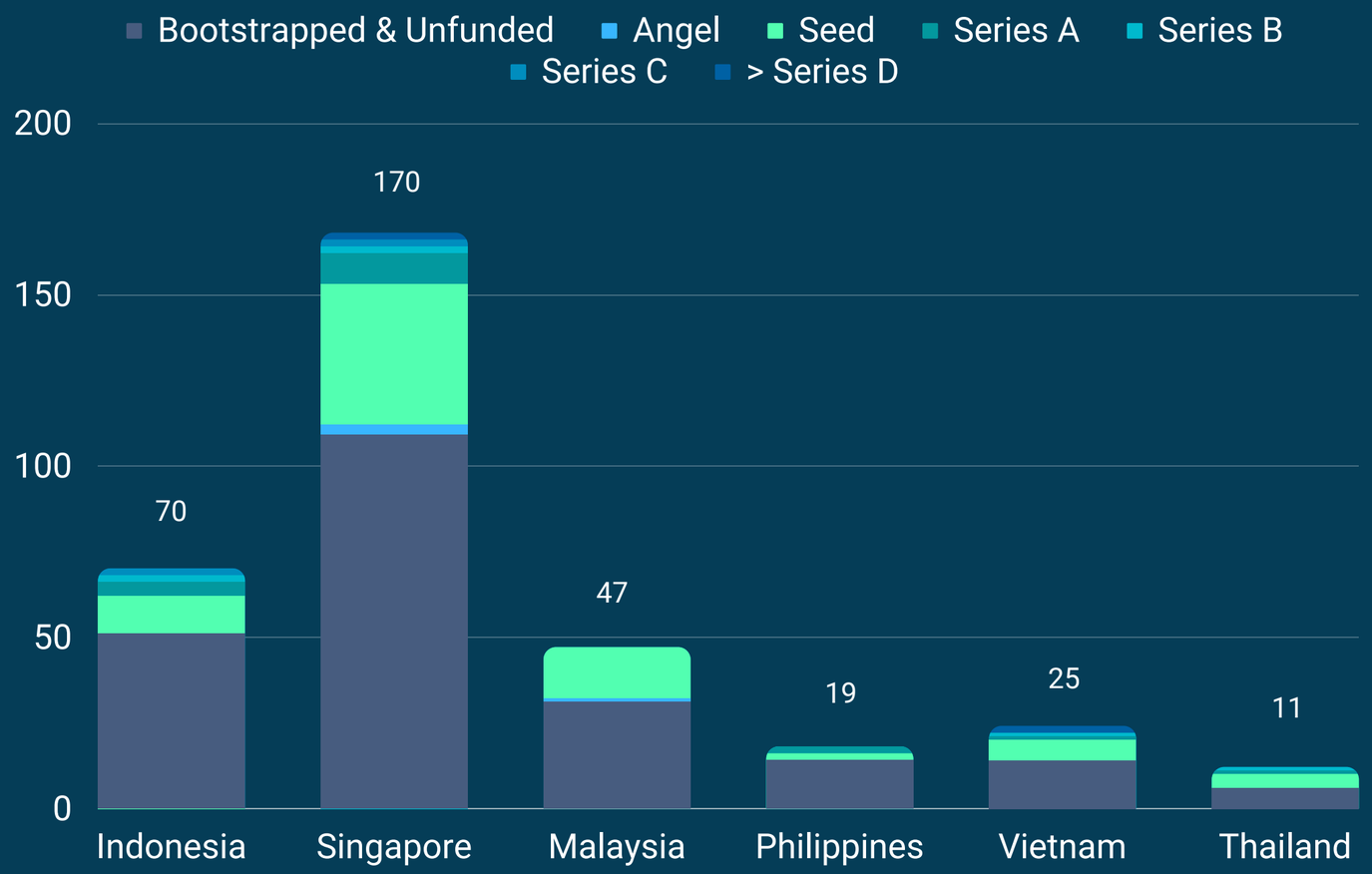
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SOUTHEAST ASIA EDTECH

- SEA EDTECH STARTUPS
  - NUMBER
  - STAGE
  - TARGET GROUPS SERVED
  - VALUE
- EDTECH SNAPSHOT PER COUNTRY

342 EdTech startups

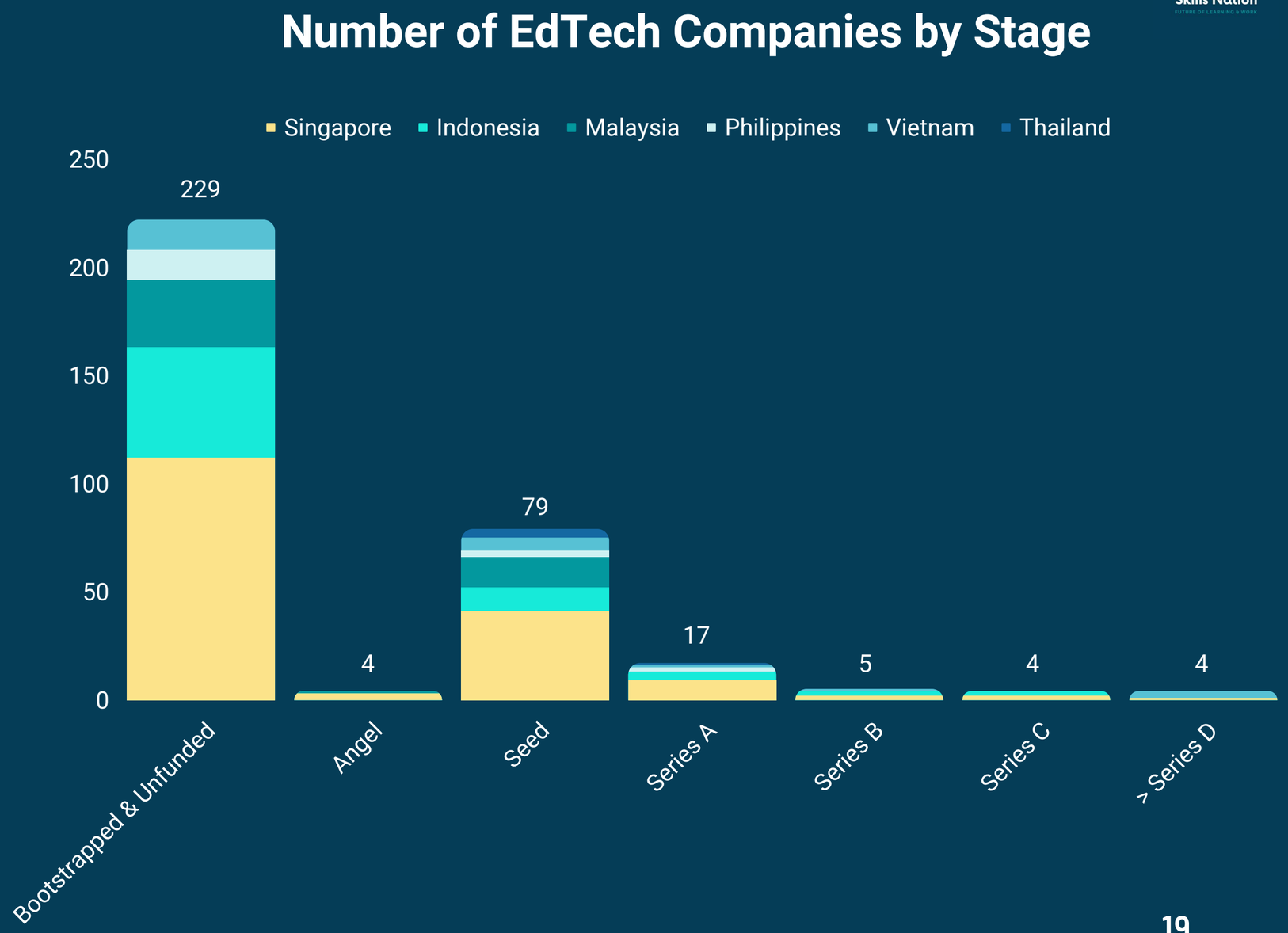
The EdTech startup ecosystem in the six Southeast Asian countries in focus, comprises **342** active companies, of which **49%** are headquartered in Singapore.



A nascent sector ...

67% (229) of the active EdTech companies in the region have not received angel or venture capital (VC) funding (yet). Of the 33% (113) funded companies, nearly 70% are at Seed-stage, demonstrating the relatively young age of the sector.

Further in the report, we see support for this notion, given that 75% of all investment in EdTech in the region since 2016, was raised in 2021.

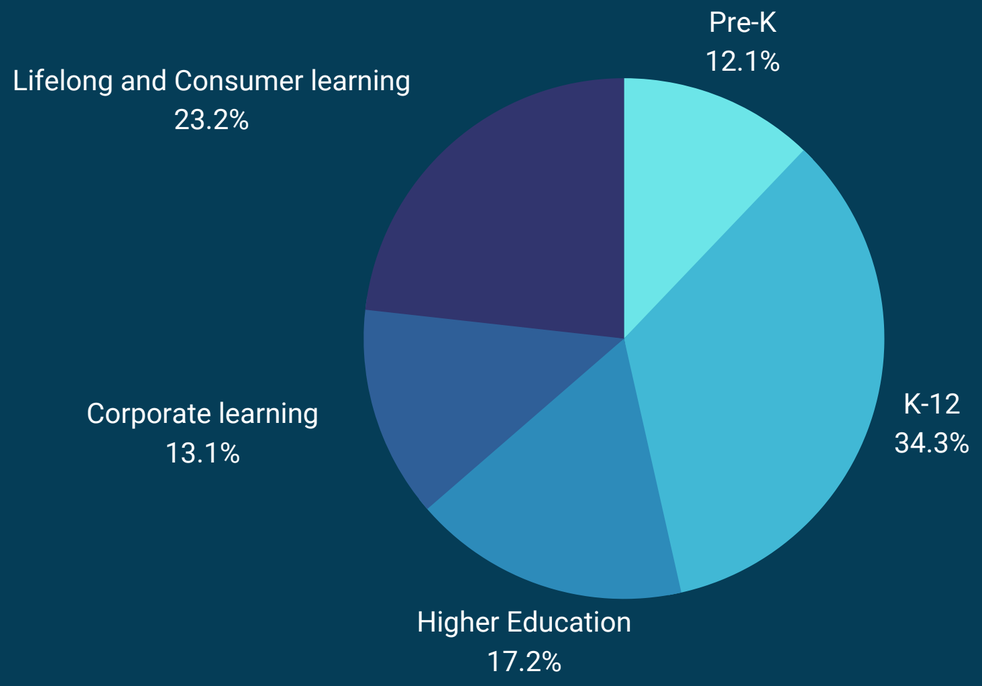


Target groups served

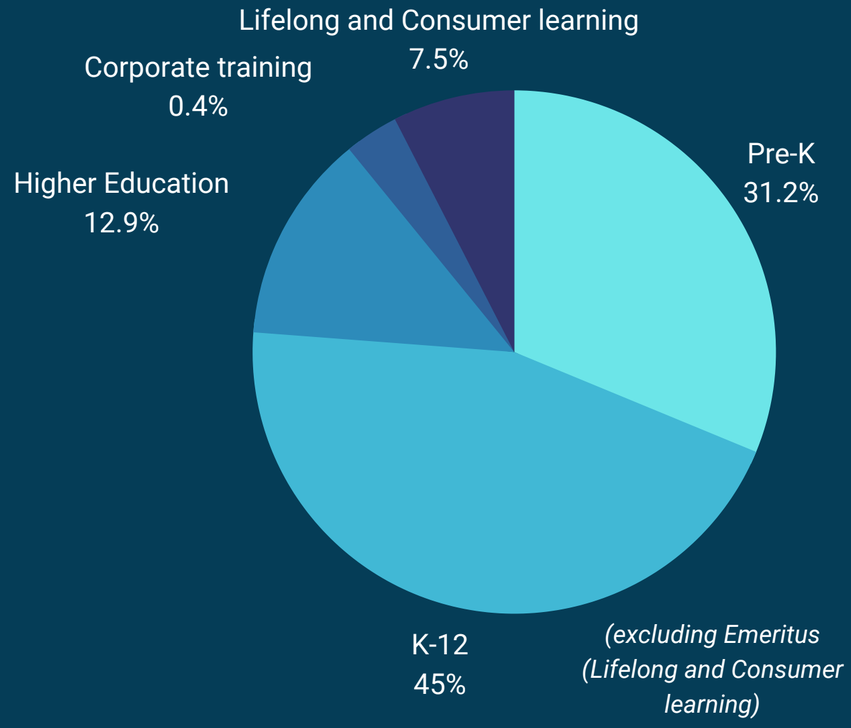
The focus of EdTech solutions is almost equally split between adult-learning and child-learning. However, over 75% of all capital invested goes to companies focusing on child-learning.

Most EdTech startups target K-12 (ages 6 - 18), and these solutions also receive the most funding. Pre-K (Kindergarten) receives most funding in relative terms.

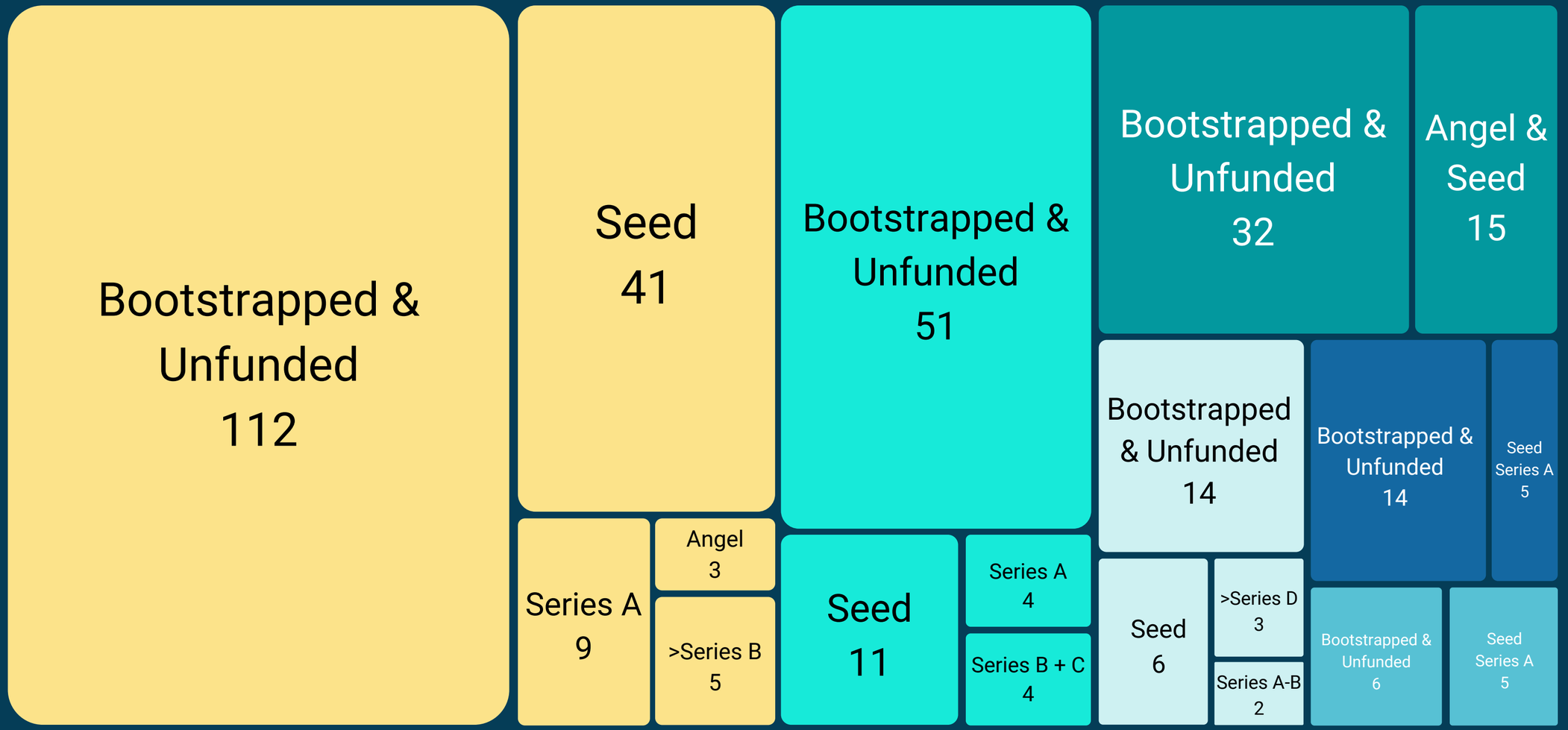
Share of number of companies per target group



Funding per target group (2014-2021)



Number of EdTech start-ups by country and stage



Total value of EdTechs in the region is USD 6.7 bn

The estimated total valuation of EdTech companies in the six countries is **USD 6,729 mn**.

77% of the value is from Singapore-based companies (of which over 20% is generated from one company, Emeritus).

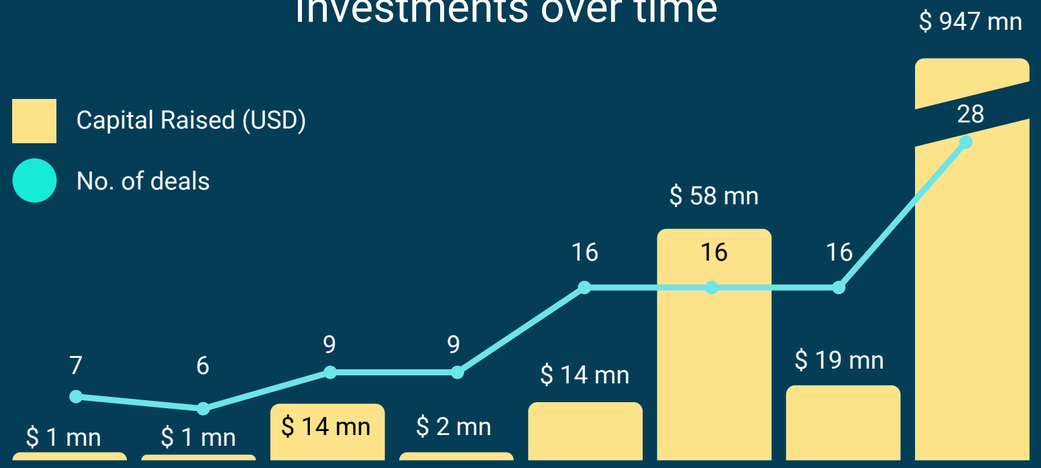
Emeritus has raised a total of USD 690 m in funding over two rounds, the last round being USD 650 m in August 2021. This makes up nearly 50% of all funding in the region.



Methodology: the valuation of start-ups is based on their market cap or latest transaction value in Euro. Transaction value is realised from exit or implied unrealised valuation from the latest VC round, which is either announced or estimated by Dealroom based on market-based assumptions for dilution.

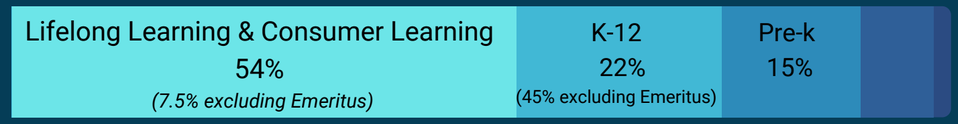
EdTech Snapshot: Singapore

Investments over time



Only Disclosed Deals | Source: Dealroom, Kaizenvest

Funding based on target group (2014 - 2021)



With over USD 1.1bn invested in the last eight years, only ~8% was spent on Higher Education and 2% went to Corporate Learning.

EdTech based on the latest round

58
EdTech* companies funded



Angel & Seed & Series A

Series B & Over

~9% of SG EdTech start-ups go beyond Series A

**EdTech companies excluding bootstrapped and unfunded | Source: Dealroom*

Average Deal Size (2021)
USD 36 mn
(USD 13 mn excluding Emeritus)

Average Deals Done
11 ►► 19
2016 - 2018 deals/year
2019 - 2021

~6,500
employees hired across 170 EdTech companies

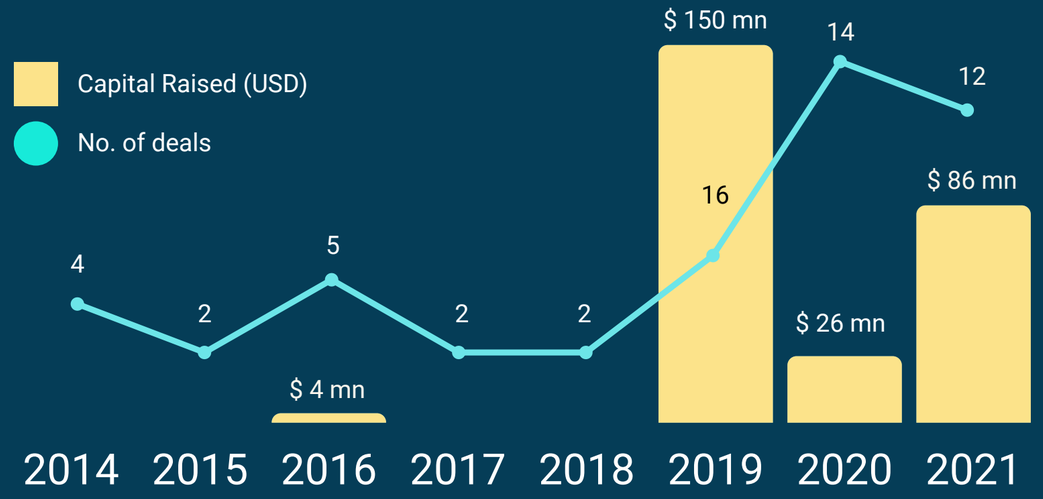
9x
more capital invested in 2021 vs capital raised in the past five years
*(number is **3x** if excluding Emeritus)*

Prominent EdTech Companies

LingoAce
EMERITUS
Learn. From the world's best.
KooBits
Geniebook
CIALFO

EdTech Snapshot: Indonesia

Investments over time



Only Disclosed Deals | Source: Dealroom, Kaizenvest

Average Deal Size (2021)
USD 7 mn

Average Deals Done
3 ►► **11**
2016 - 2018 2019 - 2021
deals/year

~11,800
employees hired across
70 EdTech companies

Indonesia saw a significant spike in EdTech funding in 2019 led by RurangGuru

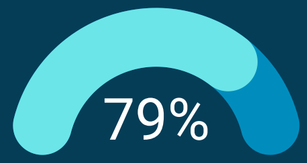
Funding based on target group (2014 - 2021)



With over USD 266 mn invested in the last eight years, only ~2% was invested in Higher Education, ~2% in Corporate Learning, and ~3% in Lifelong Learning.

EdTech based on the latest round

19
EdTech* companies funded



Angel & Seed & Series A

Series B & Over

~21% of ID EdTech start-ups go beyond Series A

**EdTech companies excluding bootstrapped and unfunded | Source: Dealroom*

Prominent EdTech Companies

ruangguru
colearn
zenius
cakap

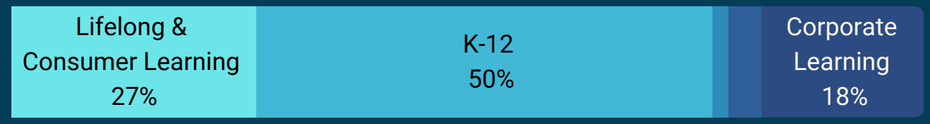
EdTech Snapshot: Malaysia

Investments over time



Only Disclosed Deals | Source: Dealroom, Kaizenvest

Funding based on target group (2014 - 2021)



With ~USD 3mn invested in the last eight years, only 1% went to pre-K and 4% went to higher education.

EdTech based on the latest round

15
EdTech* companies funded



Angel & Seed & Series A | Series B & Over

There are no Malaysian EdTech start-ups that have gone beyond Series A

**EdTechs excluding bootstrapped and unfunded | Source: Dealroom*

Average Deal Size (2021)
USD 180 k

Average Deals Done
2 ► **3**
2016 - 2018 | 2019 - 2021
deals/year

~400
employees hired across 47 EdTech companies

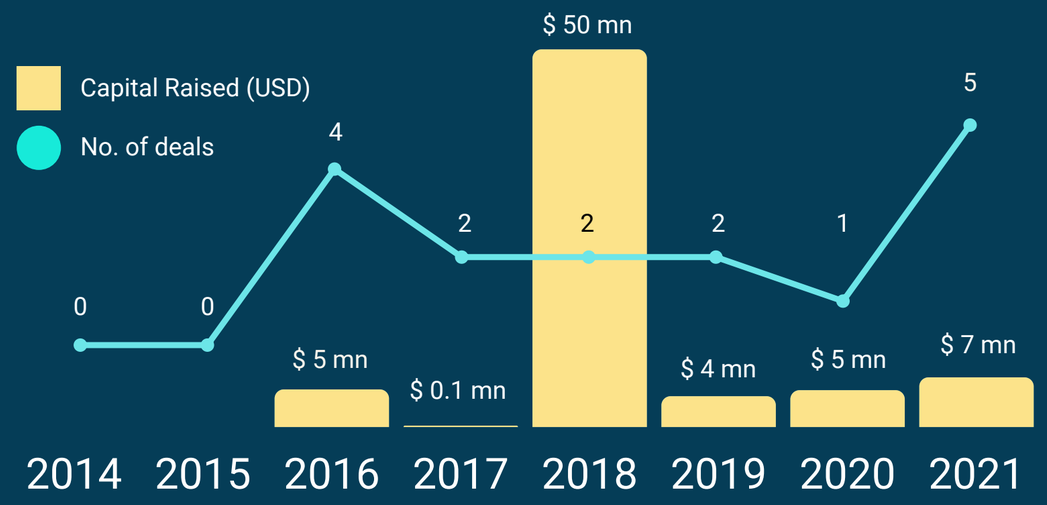
Malaysia saw a significant spike in EdTech funding in 2020 led by AOne and Forward School. In Jan 2022, Pandai raised $2mn in a Seed Round

Prominent EdTech Companies

Forward School
AOneSchools
Pandai
FUTURE LAB

EdTech Snapshot: Vietnam

Investments over time



Only Disclosed Deals | Source: Dealroom, Kaizenvest

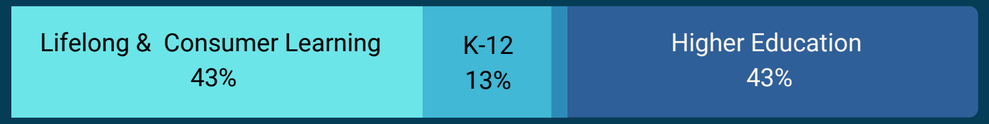
Average Deal Size (2021)
USD 1.3 mn

Average Deals Done
3 ►► **3**
2016 - 2018 2019 - 2021
deals/year

~3,800
employees hired across
25 EdTech companies

Vietnam saw a significant spike in EdTech funding in 2018 led by Topica for Series D

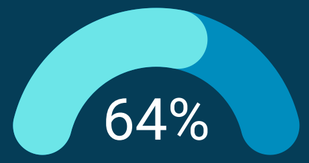
Funding based on target group (2014-2021)



With ~USD 70mn invested in the last eight years, only 2% went to Pre-K and close to 0% went to Corporate Learning

EdTech based on the latest round

11
EdTech* companies funded



Angel & Seed & Series A

Series B & Over

There are: 1 Series B ,1 Series D, and 2 PE funded EdTechs in Vietnam.

**EdTechs excluding bootstrapped and unfunded | Source: Dealroom*

Prominent EdTech Companies

TOPICA
LEARN ONLINE, GO GLOBAL

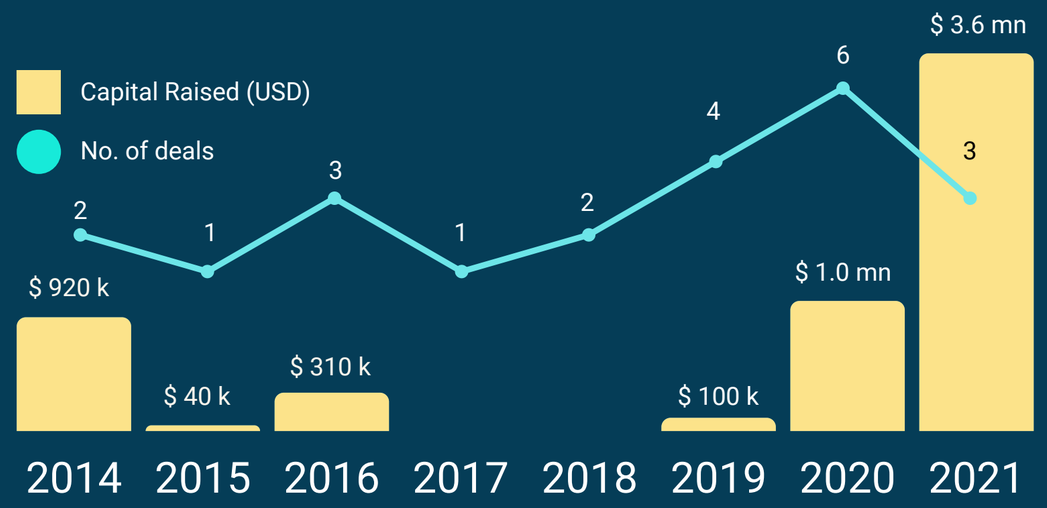
EVEREST EDUCATION

EDUPIA
Tiếng Anh online chất lượng cao

marathon EDUCATION

EdTech Snapshot: Thailand & Philippines

Investments over time



Only Disclosed Deals | Source: Dealroom, Kaizenvest

Funding based on target group (2014-2021)



With ~USD 6mn invested in the last 8 years, 5% went to K-12, Higher Education, and Lifelong and Consumer learning

EdTech based on the latest round

10
EdTech* companies funded



Angel & Seed & Series A

Series B & Over

There are no EdTech start-ups that have gone beyond Series A in either country

**EdTechs excluding bootstrapped and unfunded | Source: Dealroom*

Average Deal Size (2021)
USD 1.2 mn

Average Deals Done
2 ► **4**
2016 - 2018 2019 - 2021
deals/year

~2,200
employees hired across 30 EdTech companies

Thailand and Philippines saw strong growth in EdTech funding in 2021

Prominent EdTech Companies

GLOBISH
CloudSwyft
InvestEd
vonder
Edukasyon.ph

3

INVESTMENT TRENDS

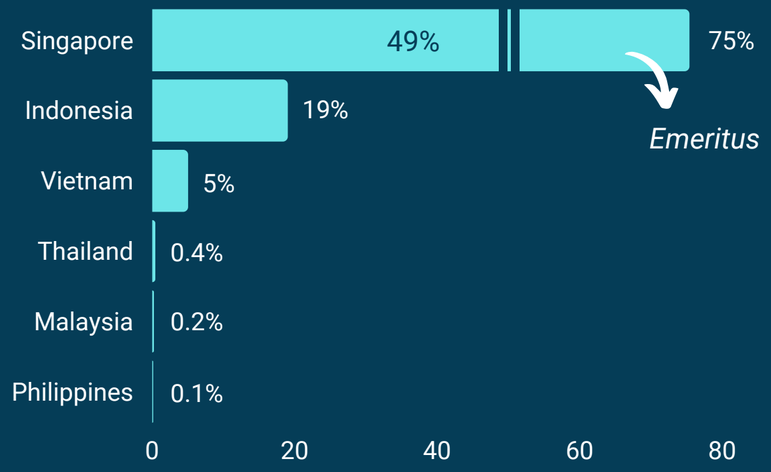
- TOTAL CAPITAL RAISED BY SOUTHEAST ASIAN EDTECH STARTUPS
- EDTECH STARTUPS THAT RAISED THE MOST EQUITY INVESTMENT
- TOP SOUTHEAST ASIA EDTECH INVESTORS

Total capital raised amounts to USD 1.4 bn, of which nearly half went into Singapore-based companies

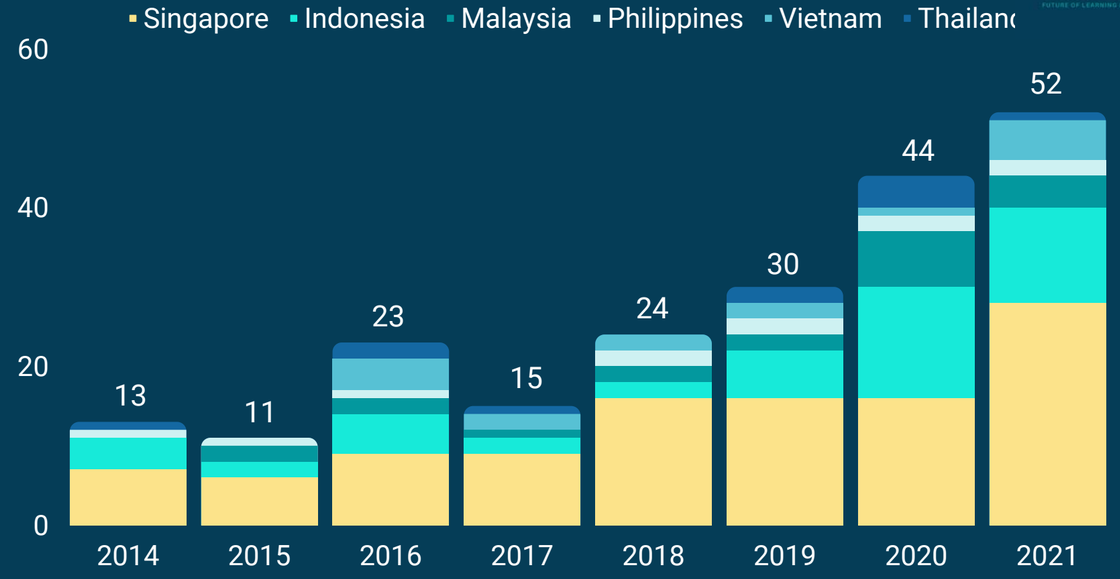
A total of USD 1.4 bn (USD 709.2 mn excluding Emeritus) has been invested in EdTech between 2014 and 2021, of which 75% was invested in 2021 (25% excl. Emeritus). In 2021, the average deal size was USD 6.8 mn (excluding Emeritus).

Nearly half of all investments into EdTech in the region go into Singapore-based start-ups (excluding Emeritus), followed by Indonesia-based EdTech start-ups.

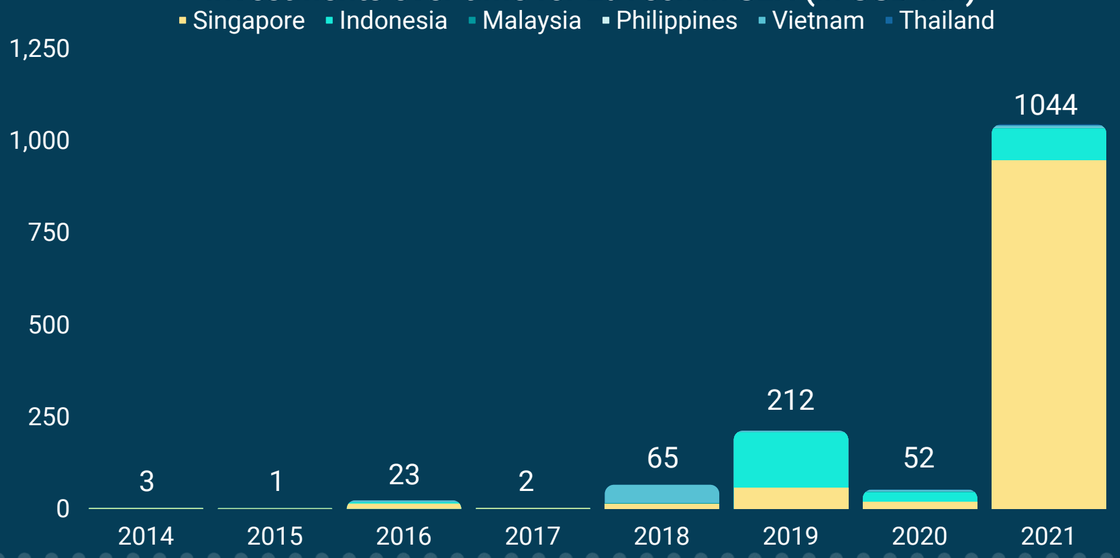
% of investments into EdTech by SEA country (2014 - 2021)



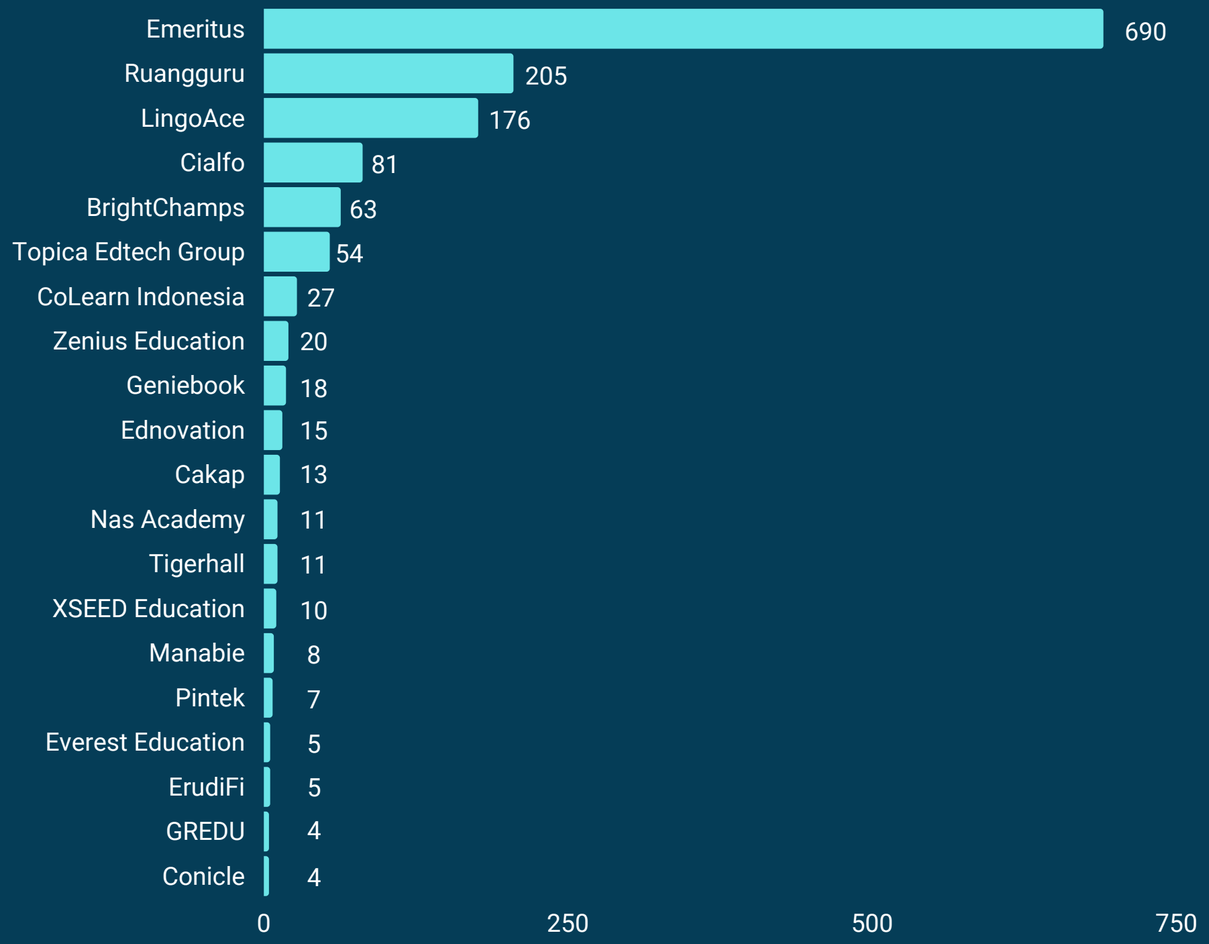
No. of Deals for EdTech Companies in SEA



Investments over time for EdTech in SEA (in USD mn)



Top 20 EdTech companies that raised the most equity investment (2014 - 2021)



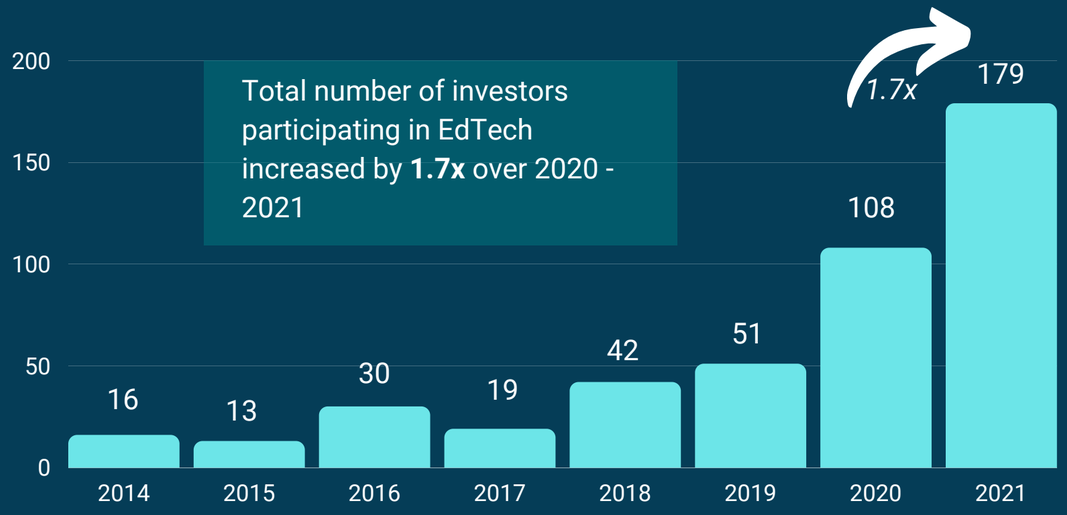
Emeritus (Singapore, 2010) offers online courses and degree programmes from over 70 universities worldwide including Harvard and Cambridge. They have seen in a jump in student enrolment from 50,000 in 2019 to 250,000 in 2021. Emeritus is a subsidiary of Indian-based Eruditus Executive Education. Emeritus has reached Series E stage, and has raised a total of USD 690 m funding over two rounds, the last mega-round raising USD 650 m led by SoftBank in August 2021.

Ruangguru (Indonesia, 2014) offers tutoring and homework help and test preparation. They offer solutions for both K-12 students and teachers using new technology such as AI and photo search. Ruangguru launched several programmes during the pandemic, including a free online school that has been accessed by 10 million students, and free access to a learning management tool for teachers. Ruangguru is in late VC stage after their USD 55 mn round led by Tiger Global and GGV Capital in August 2021.

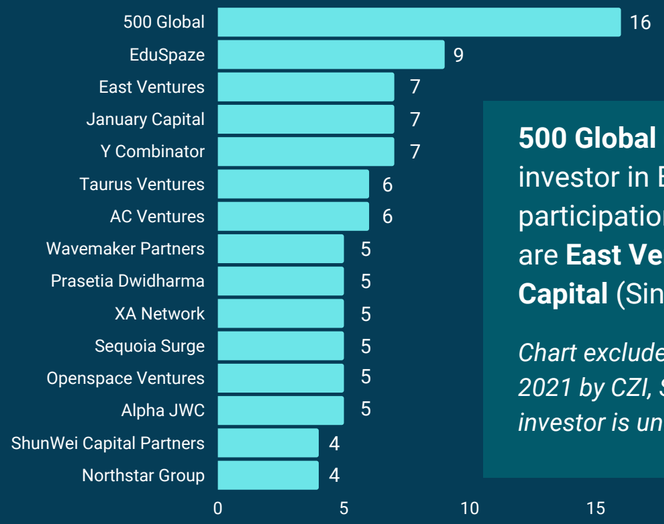
LingoAce (Singapore, 2013) provides an app-based platform for Chinese language learning for kids 3 - 15 years old. The app offers personalised learning plans delivered in small-size, live classes, with a teacher of their choice, and an in-app class-booking module. LingoAce raised USD 105 mn Series C in 2021 led by Sequoia Capital India, joined by Owl Ventures and Shunwei Capital.

Most investors in EdTech in Southeast Asia are from the United States

No. of Investors Participating in SEA EdTech



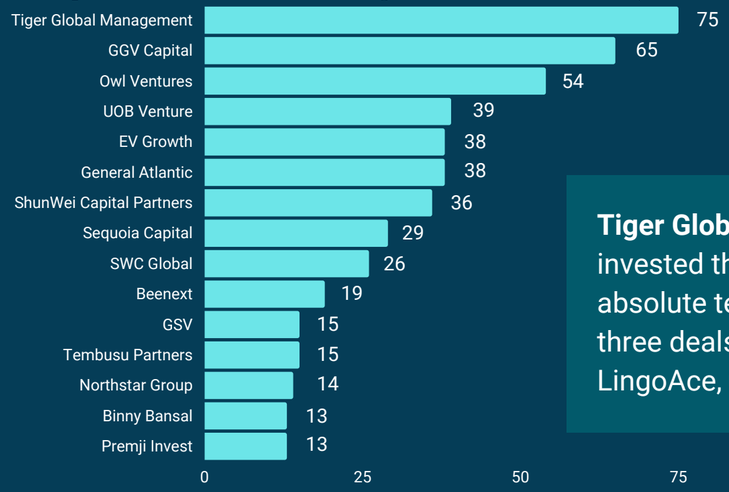
Top 15 Investors by No. of Deals



500 Global (HQ in US) is the most active investor in EdTech in SEA, with a total of 16 participations. The most active local investors are **East Ventures** (Indonesia) and **January Capital** (Singapore).

Chart excludes Emeritus' USD 650 mn funding round in 2021 by CZI, SoftBank Fund and Accel. The amount per investor is undisclosed

Top 15 Investors by Deal Value (USD'mn)



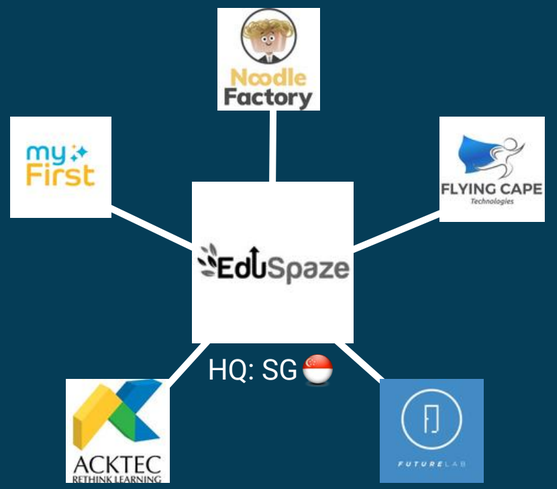
Tiger Global Management invested the most capital in absolute terms (in a total of three deals: Ruangguru, LingoAce, Cialfo)

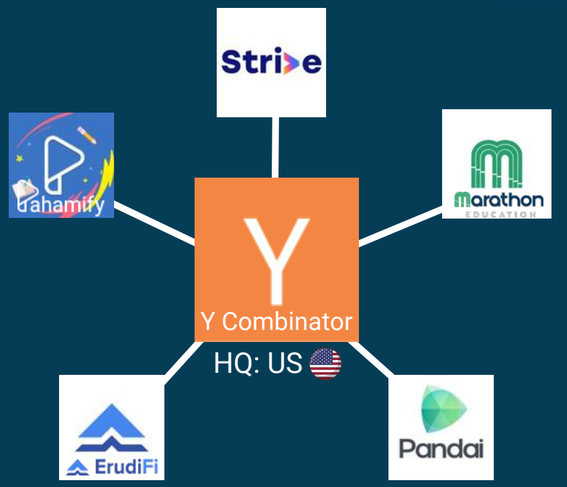
Top investors in EdTech by Average Deal Size (USD 'mn)



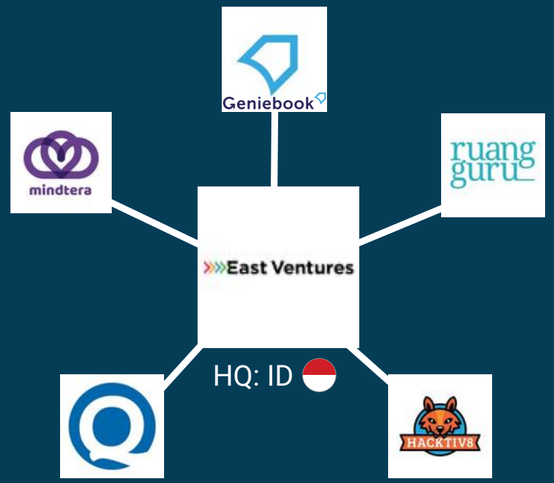
The investors who made the largest capital investment on average in EdTech in SEA are **EV Growth** (Singapore), **General Atlantic** (US), and **GGV Capital** (US).

Top SEA EdTech investors and a sample of the companies they invested in











4

MARKET SEGMENTS

- MARKET SEGMENTS AND DISTRIBUTION
- STEAM
- TUTORING & HOMEWORK HELP
- ONLINE COURSES
- UPSKILLING & RESKILLING
- MANAGEMENT SYSTEMS
- LANGUAGE LEARNING

Market segments

ONLINE COURSES
Courses conducted over the internet. Online courses are usually self-paced or cohort-based

MANAGEMENT SYSTEMS
Administrative software for schools, universities and platforms

TUTORING & HOMEWORK HELP
Platforms for finding tutors and resource materials to improve academic performance

ASSESSMENT & CREDENTIALING
Solutions that issue and manage digital badges to evidence learning, including grading systems

UPSKILLING & RESKILLING
Teaching new skills to job seekers and people switching careers or industry

ADAPTIVE LEARNING
Leveraging technology to deliver customised resources and learning activities to address the unique needs of an individual learner

STEAM
Learning STEAM subjects or coding

LANGUAGE LEARNING
Solutions enabling language learning

TEST PREP
Solutions enabling test and exam preparation

ADMISSIONS & ENROLMENT PLATFORMS
Platforms that provide quick and simplified registration and enrollment for students and parents

IMMERSIVE TECH
Startups that use XR, AR, VR, Voice, AI, Chat, Robotics and other frontier technology to educate people

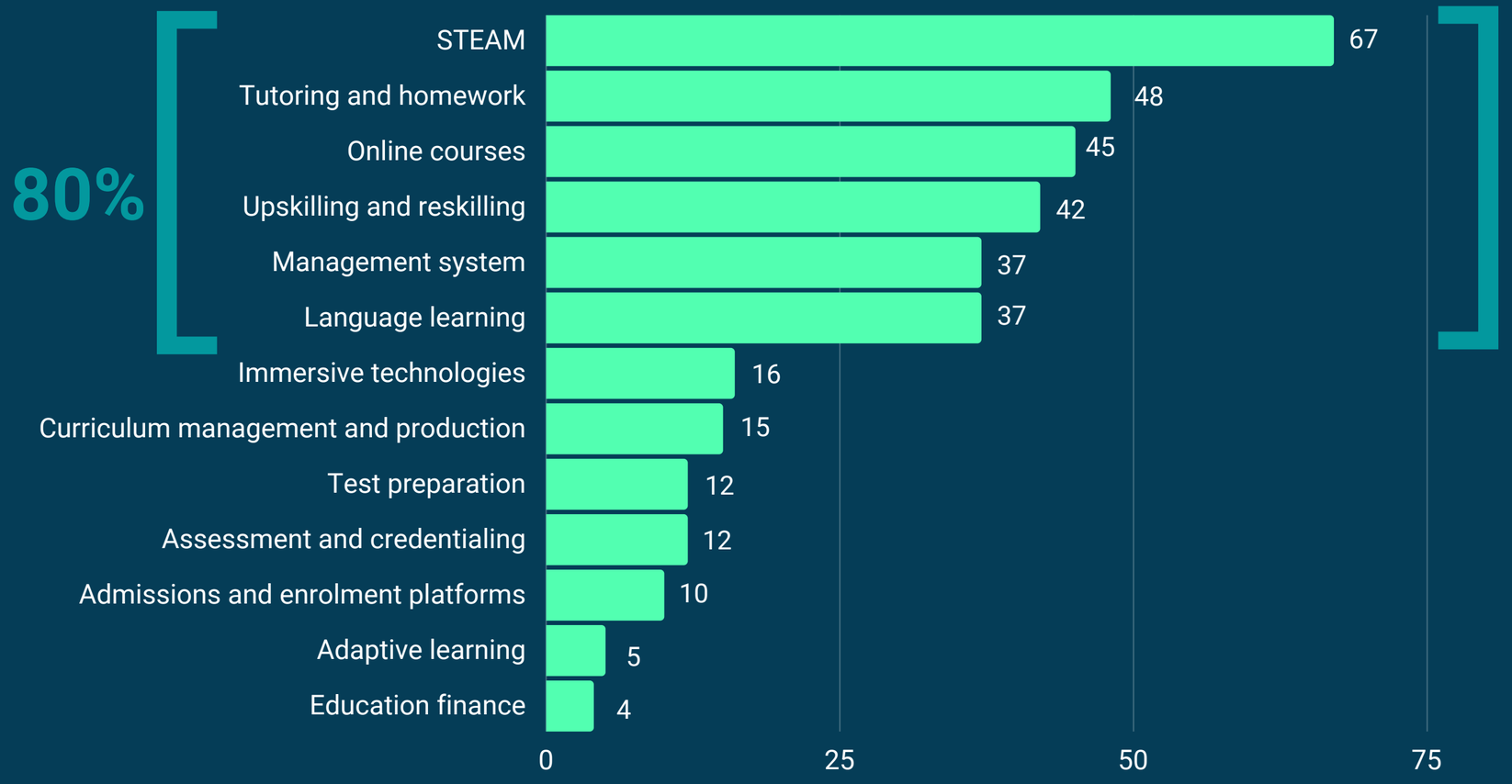
EDUCATION FINANCE
New tech-enabled solutions for financing education

CURRICULUM MANAGEMENT & PRODUCTION
Helping teachers and administrations design educational curriculum

Most EdTechs in the region focus on 'STEAM' and 'Tutoring & homework help'

80% of all EdTech companies in Southeast Asia operate in five market segments:

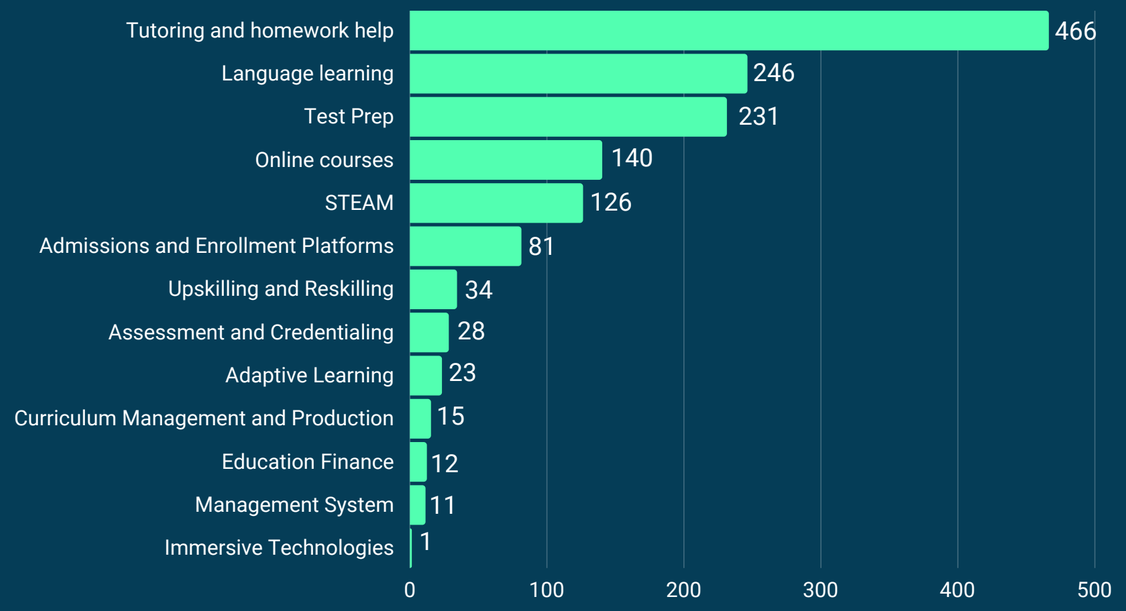
- STEAM
- Tutoring & homework help
- Online Courses
- Upskilling & Reskilling
- Management Systems
- Language Learning



Methodology: Companies have multiple market segment tags. Therefore, they may be counted twice in market segment analysis.

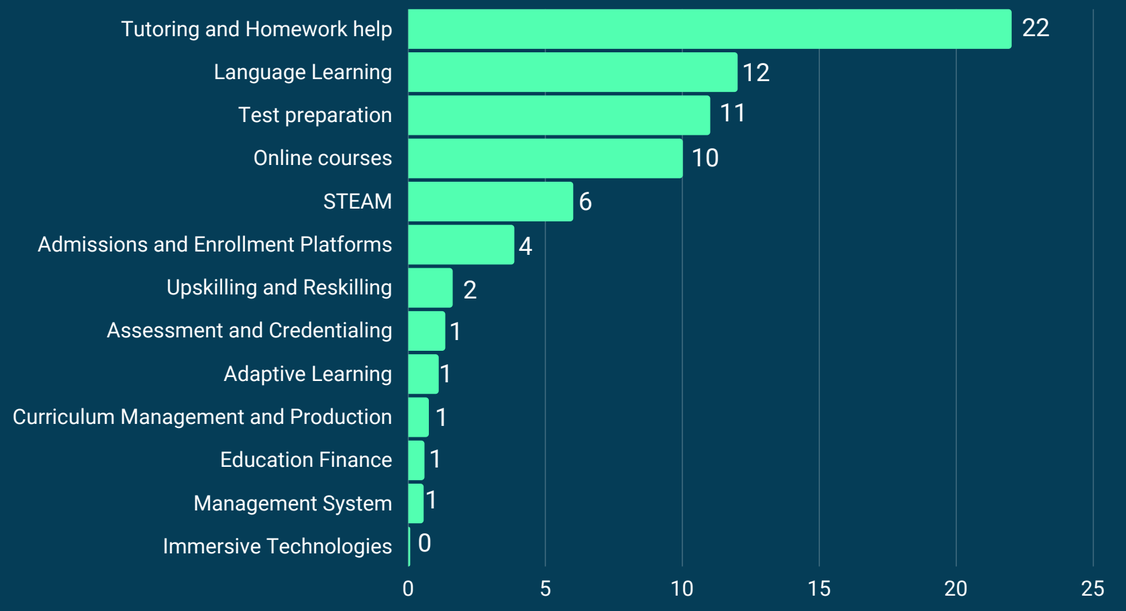
'Tutoring & homework help', 'Language Learning' and 'Test preparation' solutions receive the most in funding

Total equity investment per market segment (2014 - 2021) (in USD mn)



Excluding 690mn by Emeritus

Average equity investment per deal per market segment (2014 - 2021) (in USD mn)



Excluding Emeritus

STEAM

STEAM companies provide educational materials for science, technology, engineering, arts and mathematics. Their solutions range from offering coding courses to improving musical talent. These companies focus on providing students with more specific or in-depth knowledge than is provided by traditional educational institutions.

67
companies

USD 126 mn
equity investment since 2014

doyobi

qweebi

BrightCHAMPS
WINDOW TO NEXTGEN SKILLS

ZAP ZAP MATH

KooBits

CoderSchool

CoderSchool (Vietnam) (2015)

CoderSchool is an online coding school , that pivoted from offline to online in early 2020 and saw 100% quarter-over-quarter growth. Vietnam's demand for IT talent is increasing at 47% per year. CoderSchool raised their Seed round with Monks Hill Ventures and XA Network amongst others, in September 2021.

Strive

Strive Math (Singapore) (2020)

With Strive, students learn math through code, directly applied to games and art projects, making the result visible. Content is supplied by top universities, and students are matched with a coach. Strive is backed by YCombinator, and received USD 125k pre-seed funding in the summer of 2021.

IQube

iQube (powered by Tactiles) (Philippines) (2015)

Students learn about electronics through an app and a kit containing smart physical blocks. With a virtual teaching assistant available to students, the challenges are aligned to curriculum standards. Tactiles is funded by the IdeaSpace Foundation.

String Soul

String Soul (Malaysia) (2019)

String Soul is a Malaysian mobile and iPad-based app with tutors who teach piano to children and adults in 1:1 lessons. It aims to make music learning accessible and affordable for kids as well as adults. String Soul funded their seed round for USD 150k in early 2021.

Tutoring & homework help

Tutoring and homework help includes platforms for students and tutors to connect as well as systems providing materials for after school learning and homeschooling. Mostly, the content provided is aligned to the national curriculum (Ministries of Education). Some companies facilitate the process of finding tutoring services or teachers, others offer games, lesson plans, or educational content.

48
companies

USD 466 mn
equity investment since 2014

Classmiles

ruang guru

Tutopiya
LIVE ONLINE TUTORING

Clevai

Pahamify

Geniebook

Geniebook (Singapore) (2017)

Geniebook offers personalised, adaptive learning support for school subjects through AI-generated worksheets. Live teacher support is available too. In 2021, Geniebook raised USD 16.6 mn in their Series A round led by East Ventures and Lightspeed Venture Partners.

co·learn

CoLearn (Indonesia) (2019)

CoLearn offers homework help through pre-recorded videos and live online classes. CoLearn's mission is to improve education standards in Indonesia. They have raised USD 27 mn in Series A funding in 2021 and 2022 by Alpha Wave Incubation, GSV Ventures and January Capital, amongst others.

EQUALLYY

Equallyy (Thailand) (2018)

Based in Bangkok, Equallyy provides online tutoring and test preparation for K-12, through a self-learning platform. Videos and quizzes are offered, as well as a collaborative platform where 'study buddies' can meet and discuss. Equallyy is currently at the seed stage.

Marathon EDUCATION

Marathon Education (Vietnam) (2021)

Marathon is currently focused on after school tutoring for math and science courses for secondary school, and will eventually cover all national curriculum subjects. Marathon has received USD 1.5 mn seed funding from Forge Ventures and was funded by YCombinator in January 2022.

Online courses

Learning content is hugely varied, spanning online platforms, apps and software that directly educate learners in a number of industries. This ranges from student revision to life skill coaching for jobseekers. The market also includes products and services that improve general learning outcomes, such as tools for uploading and sharing resources online or arranging in-person meetings with teachers and lecturers.

45
companies

USD 140 mn
equity investment since 2014
(excluding Emeritus)

Neobael (Singapore)

Neobael is an online platform for context-driven, active learning for kids in K-12. In a fictional setting, e.g. in a football club, on a deserted island, or in the rainforest, children learn to problem-solve while learning curriculum-aligned subjects. Pre-seed stage funded for USD 215k by KPB Investments in 2021.

Edupia (Vietnam) (2017)

Edupia (by Educa Corporation) offers English language learning to primary school children in Vietnam. The app offers lectures aligned to the national curriculum, exercises and speaking practice. Edupia raised USD 2 mn in their Series A round in 2019 backed by ReDefine Capital Fund, the Singapore-arm of Alibaba-backed eWTP Technology Innovation Fund.

HarukaEDU (Indonesia) (2013)

HarukaEDU started out as a partner to universities to launch online learning, through their platform, UniEDU. In 2018, they launched Pintaria, a platform for lifelong and consumer learning. In 2019, CorporateEDU was launched specifically for corporate training. Pintaria raised Series C in 2019 and was backed by American trading firm SIG and Appworks.

Genius U (Singapore) (2015)

Part of Genius Group, a large entrepreneur education group, GeniusU is an edtech platform providing aspiring entrepreneurs across 200 countries with personalised learning paths and micro-degrees on business building skills. GeniusU raised USD 1.4m in seed-round funding with many different investors.

Upskilling & Reskilling

The start-ups working in this field, aim to teach students or employees skills, that improve their workforce, or provide new skills to job seekers. Learning content is hugely varied, spanning online platforms, apps and software that directly educate learners in a number of industries from coding to life skill coaching.

42
companies

USD 34 mn
equity investment since 2014

HACKTIV8 speakin UPCODE ACADEMY ROCKET ACADEMY

Tigerhall (Singapore & US) (2018)

Tigerhall is a B2B social learning app for professionals, where industry experts and business leaders share their knowledge, delivered in short content pieces through video, podcast, lifestream etc. Tigerhall raised USD 10.7 mn funding in total, of which USD 7m in Dec 2921 for their Series A round, was led by Monk's Hill Ventures.

Binar Academy (Indonesia) (2017)

Binar offers online courses in different learning formats to learn skills relevant to the digital world. These include UX/UI design, Android Engineering, Digital Marketing and Product Management. Binar also supports job search through partnerships with hiring partners. Binar Academy was founded in 2019 and is backed by Ango Ventures.

AkadAsia (Singapore; Philippines) (2019)

Focusing on educators, AkadAsia provides a platform for teacher upskilling, to help them teach more effectively using technology and digital infrastructure. The platform offers content, tools and blockchain certifications. They were backed by EduSpaze and Supercharger Ventures for their seed round in 2020.

42 (Singapore, Malaysia, Thailand)

Embracing a 21st century concept of learning, 42 provides technology skills training through collaborative and project-based learning. The school has no teachers, books or lectures. 42 is accessible for everyone aged 18+. Neither tuition fee, coding experience nor diploma are required to join. 42 has 42 campuses worldwide and is a non-profit organisation.

Management Systems

Supportive software systems for schools and universities provide a central location for the education process to be managed. These platforms provide a hub from which teachers, students and parents can gain access to important information such as upcoming events or exams, daily lesson plans, and the results of previous assessments.

37
companies

USD 11 mn
equity investment since 2014

Quintal

Kindersphere

WELA SCHOOL SYSTEMS

School Bright

School Bright (Thailand) (2016)

School Bright provides a school management system with digital solutions for managing attendance and leave, finance and accounting, homework, canteen, and messaging. In 2021, they raised their Series A with Stormbreaker Venture for an undisclosed amount.

Edmicro

Edmicro (Vietnam) (2018)

Edmicro aims to make learning acccessible for everyone by building a learning ecosystem called Onluyen.vn, which uses cloud computing and machine learning algorithms to make learning better for K-12 students as well as for teachers. It received seed funding in 2021 led by Insignia Ventures Partners in Singapore.

eduTinker™

eduTinker (Singapore) (2020)

eduTinker helps schools move from off-line to online. It provides an in-app solution for online class delivery, distribution of assignments and their evaluation, communication between teacher-student-parent, attendance and admissions management. Their primary markets are India and Nepal. The company is bootstrapped.

AOne

Aone (Malaysia) (2015)

My AOne Learning started as an educational platform for offline lessons. During the pandemic, AOne introduced a management system for schools, tuition centres and course discovery which is currently being used by over 1200 education providers throughout Southeast Asia. AOne is funded by Wavemaker Partners.

Language Learning

Providing tech-enabled language learning, these companies encourage novel methods for engaging students with the culture, dialect, or traditions of other countries. This segment includes global platforms that offer a wide selection of languages and levels, as well as narrower offerings for an in-depth understanding of a country.

37
companies

USD 246 mn
equity investment since 2014

Cakap (Indonesia) (2013)

Cakap offers a two-way learning platform where teachers and learners connect to learn Asian languages and English. The age group covers both children and adult learners, including corporate employees. Cakap has raised a total of USD 13 mn in funding. The latest round was raised at the end of 2021 through a Series B led by MDI Ventures.

Schola (Singapore; Vietnam) (2017)

Schola uses adaptive intelligence technology to personalise English language and science learning for school-aged kids (K-12). They offer live online learning, 1:1 with teachers, supported by smart books and apps. They were funded by 500 Global for their seed round in March 2019.

eJOY (Vietnam) (2017)

Ejoy offers asynchronous English language learning via Youtube, Netflix and other apps, in Vietnam. The cross-platform tool functions as a plug-in to web browsers and allows learners to learn words while consuming video or article content on the go. They raised their seed funding in November 2021 from ThinkZone Ventures and BK Fund.

Ewa (Singapore) (2016)

Ewa enables (adult) students to learn English language through movie clips, books and games. Translations, transcriptions and pronunciations of every word are available in the app. Ewa raised a total of USD 1.5 mn. Their last funding round was a pre-seed round raised in October 2021 with SmartHub.

Companies in the remaining segments

IMMERSIVE TECH










ADAPTIVE LEARNING











ADMISSIONS & ENROLMENT










EDUCATION FINANCE







CURRICULUM MANAGEMENT & PRODUCTION








ASSESSMENT & CREDENTIALLING









TEST PREPARATION











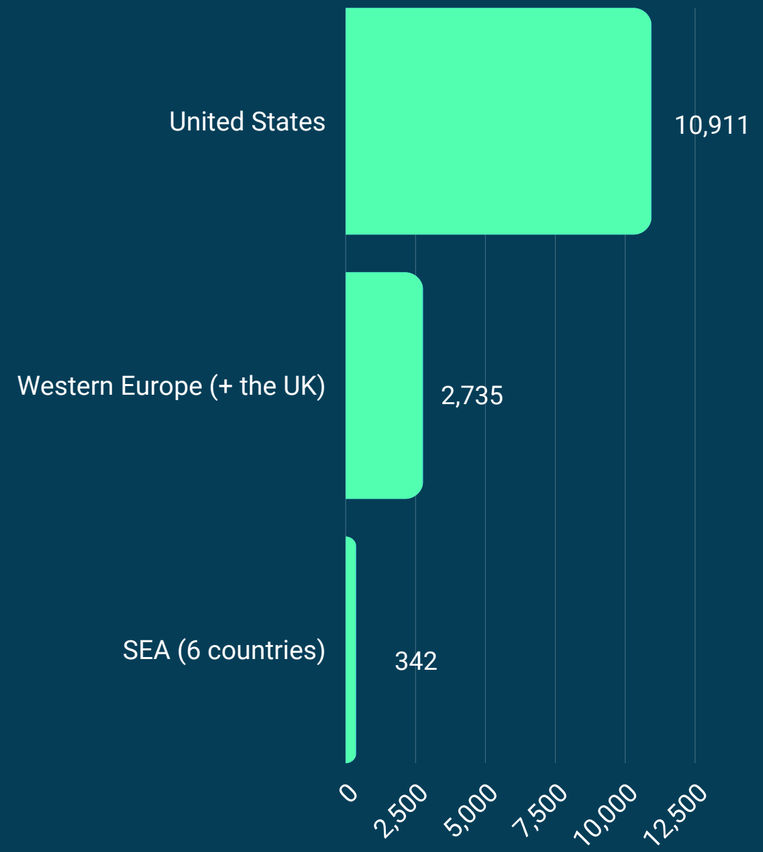
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SOUTHEAST ASIA EDTECH COMPARED

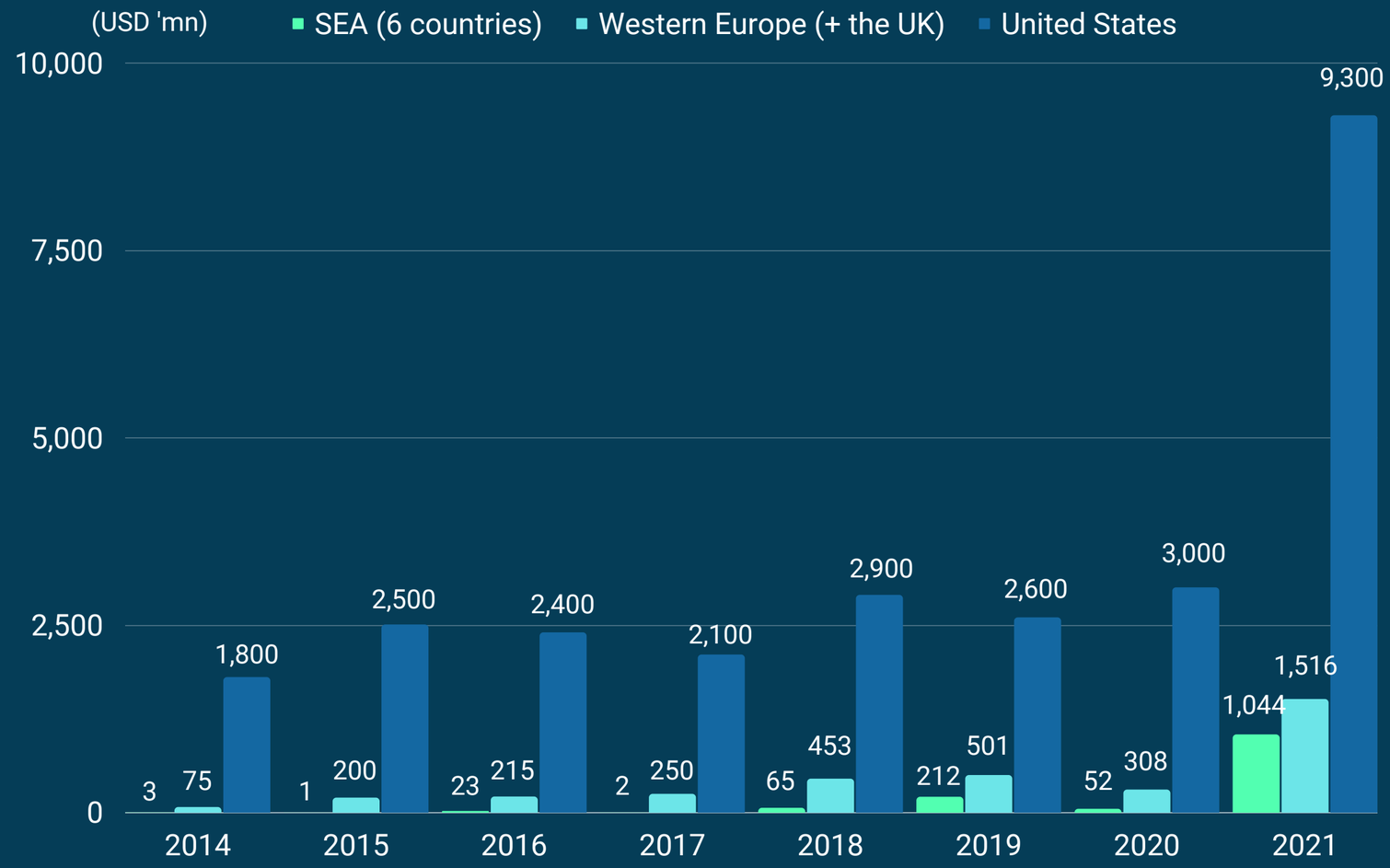
- GLOBAL EDTECH VS EDTECH IN SEA
- EDTECH VS OTHER SECTORS

EdTech in SEA is small but shows a strong upwards trend

No. of EdTech Companies



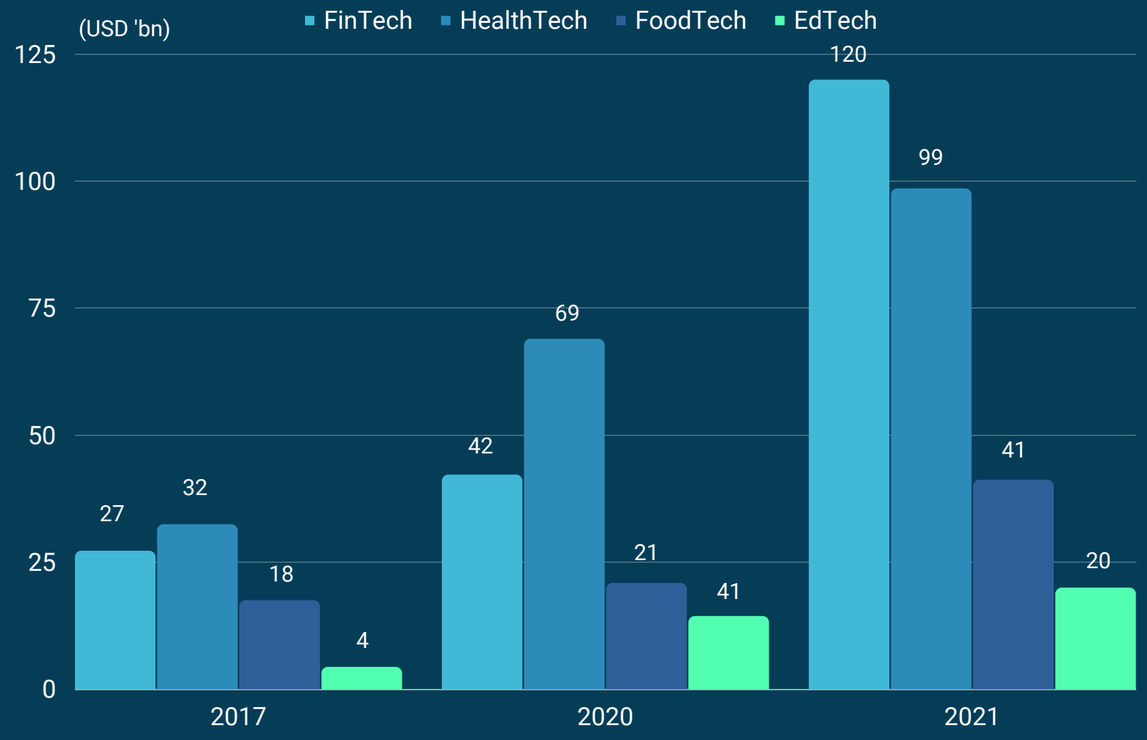
Equity Investment in EdTech Companies



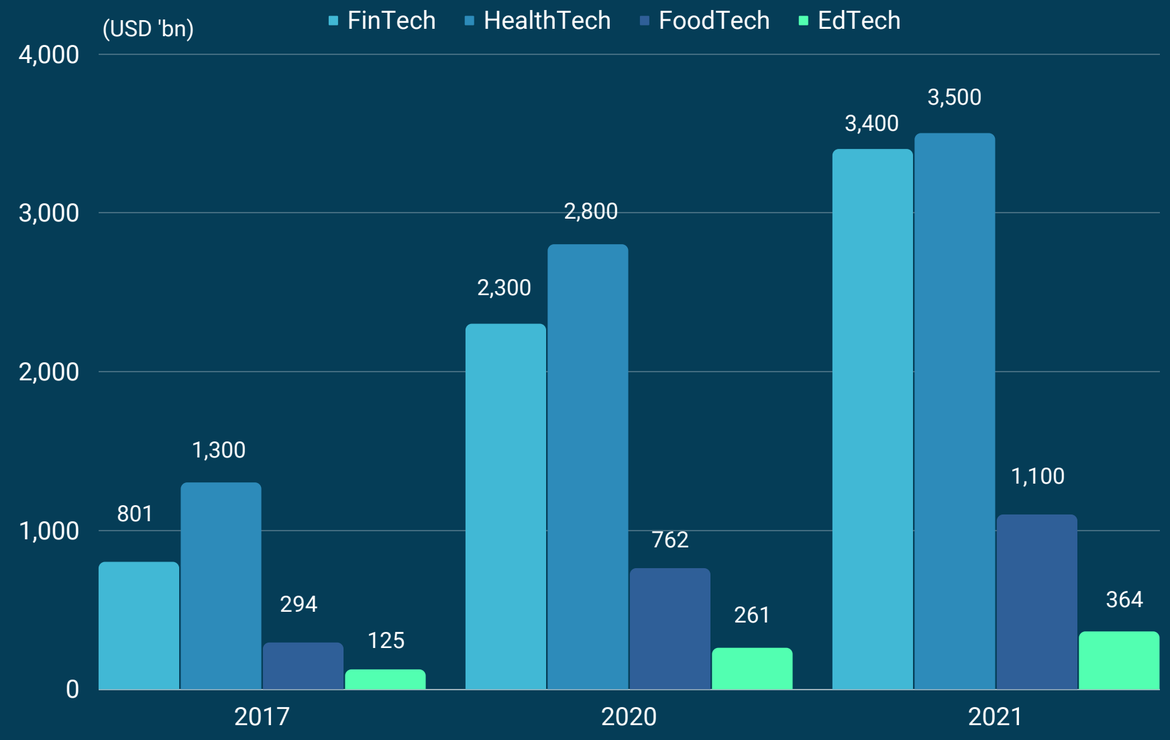
The amount of equity investment into EdTech companies (globally) is still lagging behind sectors such as FinTech, Health, and Food

In 2021, all EdTech equity investments only make up about 1/7th of the amounts invested in FinTech, and half the amount invested in the Food sector.

Fundraising across sectors



Estimated valuations across sectors



6

OUTLOOK & TRENDS

OUTLOOK & TRENDS

EdTech companies are leveraging new technologies and emerging trends to further enhance learning and teaching. How do artificial intelligence (AI) and machine learning (ML), Web3, crypto, blockchain, virtual reality (VR), augmented reality (AR) and the metaverse change the future of learning and work?

There are several concepts and innovations that we believe are worth keeping an eye on:

Adaptive learning
AI and ML technology provide the possibility to identify the "right result" based on a certain type of input provided. Taking an example from autonomous driving, the right result would be for a car to stop, if it senses a human on its way, but to continue driving if it senses a fly. For education, this means that answer A can be "right" for student X, whereas it may not be "right" for student Y because the two students are different. For example, a neuro-divergent individual may have higher expectations about certain subjects but lowered expectations about others. In education, this is a revolution. It provides a solution, abandoning the outdated '"one-size-fits-all" approach adopted during the Second Industrial Revolution. Further, AI enables automated translations, text, speech and image-recognition, document-processing, and more. This provides an endless range of use cases for education, making learning and teaching more efficient, scalable, accessible and fun. According to HolonIQ, the investment in AI and ML within education is expected to grow to USD 6 bn by 2025.

Gamified learning
Game-based and gamified education strategies use games, computer simulations and storytelling to enhance a student's engagement with learning and comprehension of the subjects. This trend is a result of the demand for technology-enabled, high quality education, and is made possible through the increased use of tablets, laptops and VR, in the classroom, workplace and home. The game-based learning market for K-12 is expected to grow at a 20.6% CAGR (USD 9 bn increase) between 2020 and 2025.

Learn to Earn (L2E)
Staying with the topic of VR and gaming, and following the trending gaming concept of Play to Earn (P2E), L2E is about rewarding people for good behaviours associated with learning. Companies like Rabbithole let the user earn a reward (all tokens) for learning, or keep skills on-ledger in the blockchain. A valid point of concern is that people, especially children, should not get accustomed to being rewarded for learning. However, if designed well, L2E concepts can encourage students to take actions that lead to better learning.

Tamper-proof, verified credentials
Verified credentials on the blockchain allow learners to build up “proof of skill”, rather than get credit for time spent in class (“Carnegie hours”). MIT began enabling students to access blockchain-based transcripts in 2015. Further, on-chain proof of skill allows for a real-time view of a learner's progress. This presents an upside compared to assessing skills in a major assessment at the end of a block. The key challenge for verified credentials on the blockchain is employer adoption (who still rely primarily on college rankings). Finally, credentials on the blockchain are tamper-proof, providing a solution to the challenge of the USD 1bn fake diploma-market.

Sources: Mirror.xyz; Kassen.substack.com; Sifted.eu; AWS EdTech Startup guide 2022

Learning DAOs
DAOs are Decentralised Autonomous Organisations, essentially decentralised communities. Members have tokens for voting, and a shared 'bank account'. In education DAOs, voting happens, for example, on syllabus, scholarships, and speakers.

It has been argued that DAOs can serve many of the purposes that higher education institutions serve today (perhaps even better than) because DAOs:

- solve the accessibility issue as they are accessible from anywhere in the world
- offer members the opportunity to build a tamper-proof on-chain resume of skills and credentials
- enable monetisation through L2E: users can earn while they learn.

An example of an education DAO is Ethernaut DAO, a learning organisation geared at training the next generation of ETH developers. This could be the General Assembly or Lambda of the future.

Soon, traditional learning organisations for adult learners may need to learn to set up DAOs to be competitive over the long term.

Learning in the metaverse
Entrepreneurs and established businesses are building in the metaverse, designing a digital world where people can play, socialise, work and learn. The opportunities presented for learning and earning in the metaverse primarily focus on accessibility of experts globally, participating in 'live' training, and meeting people from all over the world in your classroom.

Students can leave the space without any friction caused by space and time: they can go on a field trip to the Egyptian pyramids and be back before morning recess.

Virtually, anyone can buy a piece of land on Somnium Space, a multi-user VR-platform. One could build a school on it, become the school principal, choose resources, hire staff and design the building as they like. Imagine that!

The metaverse has the potential to democratise education and adult training like nothing we have seen before. However, for the next 5 - 10 years, this will remain in the hands of a few tech giants (defeating the purpose of the decentralised core of Web3). The hardware needed to access the metaverse – VR goggles and other devices – as well as strong and stable internet connectivity will be out of reach for low income groups until the next EdTech presents a solution for this challenge. ■

Sources: Mirror.xyz; Kassen.substack.com; Sifted.eu; AWS EdTech Startup guide 2022

7

INSIGHTS FROM DOMAIN EXPERTS

INTERVIEW WITH HUGH YAO, FOUNDER OF SINGAPORE'S EDTECH UNICORN

What does LingoAce do?

LingoAce offers an immersive language learning experience tailored to meet the needs of learners aged 3 to 15 across a range of language proficiency levels and diverse cultural backgrounds. LingoAce is a committed partner to both young learners and their parents. LingoAce harnesses research-backed digital content featuring animation, gamification and AI, as well as passionate teachers, to effectively deliver authentic and interactive online Chinese and English language lessons.

How was LingoAce conceptualised?

LingoAce was conceptualised in 2017 as a tool to build a better learning experience for my own son. Having moved to Singapore in 2012, I knew that my son's struggles were quite common for students studying Chinese overseas. I also saw within our community that there were families from different nationalities and backgrounds who wanted their children to learn Chinese. I saw an opportunity to build an immersive and effective language learning experience especially for children growing up in families where Chinese is not spoken.

What differentiates LingoAce from other online language learning platforms?

The immersive curriculum is tailored to young digital natives' learning styles to help them overcome language learning barriers typically associated with non-immersive environments and traditional passive language-teaching styles. Traditional language learning often emphasises rote memorisation and repetition. However, being able to learn a new language requires context, engagement and immersion. This is why we use technology to help students visualise and build context around what they learn, through digital storytelling that combines proprietary animation with tailored learning outcomes. We emphasise small class sizes in all our courses, enabling children to have the chance to interact with both the teachers and one another, to practise what they have learnt.

LingoAce has also been named to the GSV EdTech 150, a list of the world's most transformative growth companies in digital learning. Our business model resonates with parents and students, with 60% of new students acquired through referrals. Other than our curriculum, LingoAce has a team of highly dedicated and qualified teachers. All candidates undergo rigorous training before being certified to teach in online and interdisciplinary learning environments, with under 5% of candidates making the cut.

How do you see the future of LingoAce?

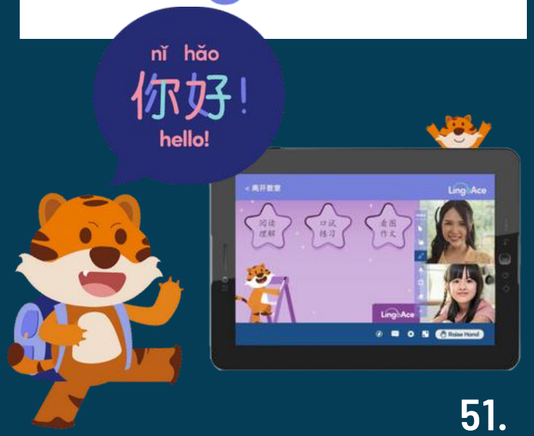
To date, we have completed more than 4 million hours of classes across different product offerings. As LingoAce continues to grow, we also recognise the demand for learning the English language, especially as it is the lingua franca in many countries and the most spoken language around the world. As such, we are launching our newest programme, English Live, in various SEA markets, including Thailand and Indonesia, as well as in selected European markets. With our focus on research-backed curriculums and quality programmes, we believe that this is a great next step for LingoAce.

From a product standpoint, there are also a few areas that LingoAce is innovating and monitoring very closely - how we leverage AR/VR, and hyper personalised learning at scale:

- Leverage AR/VR - We want to bring the digital classroom experience closer to what is great about physical classroom, where students are able to interact in class and outside of class, whilst leveraging the best of what e-learning offers us
- Hyper personalised learning, at scale – We hope that the learning platform of the future has pieces of content that challenge the learner in a way that encourages them to tip toe and reach for new knowledge, rather than placing content somewhere that may be too far out of reach.



Hugh Yao, Founder & CEO LingoAce



Do you believe that a paradigm shift has taken place in the way that learning occurs, due to the pandemic? How do you see the future of EdTech?

The pandemic has changed how people learn and teach. The experience that learners, parents and teachers have had with technology-enabled learning has ushered in a new era of education, and we are excited to contribute to the innovation in the field. As COVID-19 turns endemic, we expect continuing demand for learning online to supplement in-person, and school education. Globally, 2021 was the strongest year ever for venture capital investing in the EdTech sector. There have been significant tailwinds from COVID-19 and shifting consumer behaviours for learners across the world, which will drive demand further for several emerging business models across many regions, including Southeast Asia, India, the US and Europe.

The EdTech sector in SEA is still young, in comparison to the EdTech sector in the US and Europe. What does it take to build a successful EdTech ecosystem?

An EdTech ecosystem is successful when there are symbiotic relationships between the service providers, consumers, partners and stakeholders. There are a few essential factors that drive these relationships:

1. Working together to develop robust learning infrastructure: innovative digital content and platforms that create a differentiated online experience popular among your target group.
2. Ensuring seamless execution: infrastructure and products that make the learning experience seamless and enjoyable. As schools were thrown into home-based learning by the pandemic, they did not have the chance or resources to develop a strong solution to combat the challenges of online learning. Because we were ready before the pandemic, we were well-equipped to offer the best experience to our customers.
3. Attracting the right talent: constantly be on the lookout for talent fuelled by passion and aligned with the mission.

At LingoAce, we are constantly working to achieve all of the above.

In what way can EdTech help solve the problems with Education in Southeast Asia?

One problem with education in Southeast Asia is education access and continuity. Education satisfaction in the region fell from 85% in 2019 to 63% in 2020 (1), which could be attributed to the prolonged school closures at the height of COVID-19 distancing measures and could have widened education access gaps within populations. There is enormous potential for EdTech to improve access to education in the region. With growing internet penetration rates, there are more opportunities for users to access a myriad of learning solutions both online and offline. The availability of remote learning options at accessible price points enables more students to learn anywhere, and this allows for greater flexibility in terms of learning. While EdTech cannot fully replace physical education in schools, it complements the learning experience. EdTech is a great way to supplement learning, expanding the types of learning methods possible and helping students to gain extra practice and application outside of traditional school settings so they can master a subject.

What makes Southeast Asia attractive for EdTech investors from other regions?

Appetite for venture investment remained strong through much of the COVID-19 pandemic. There was particular interest in online business models like LingoAce that helped users all over the world access needed services despite the significant disruption to daily life. Since the pandemic began, there have been 60 million new digital consumers in Southeast Asia, of which 20 million joined in the first half of 2021 alone (2). With the untapped potential of the digital consumption and EdTech market in Southeast Asia, this trend is expected to continue as consumers realise the possibilities that technology and digital solutions can bring.

Which lessons would you like to share with founders of Southeast Asian EdTech start-ups?

Firstly, don't be afraid to start with a novel concept. In the early days, we had to focus on educating the markets to appreciate the concept of online education, which we acknowledge was not the most popular before the pandemic. However, once our users tried LingoAce, they loved the quality and convenience we offered in learning a new language.

Secondly, never underestimate the importance of recruiting the right talent. We sought to recruit quality talent for both corporate (head office) and tutoring positions and continued to ensure LingoAce remains a rewarding working environment that can retain top talent as we continue to grow. Today, some of our key talent hails from leading startups in the fintech and technology sectors. Beyond talent acquisition, it is also critical for us to train and build a pool of talent well-versed in the nuances of the education and EdTech landscape. With stronger industry know-how, there will be a growing talent pool that can support th■ growth of a sector that's poised to accelerate in the coming years.

(1) https://news.gallup.com/poll/355337/southeast-asia-sees-sharp-decline-education-satisfaction.aspx
(2) https://www.temasek.com.sg/en/news-and-resources/news-room/news/2021/e-conomy-sea-report-2021

INTERVIEW WITH SANDEEP ANEJA, INVESTOR IN LEARNING INNOVATIONS

As the founder of Kaizenvest, Asia's first Education-focused Private Equity firm, what do you believe it takes to build a successful EdTech eco-system and how do you aim to contribute to this?

The SEA EdTech ecosystem like other investment ecosystems requires foundational elements to be in place at a significant level of maturity and consistency, and we are getting closer to realising this, accelerated by COVID-19. While there are multiple foundational elements, the most important one, in my opinion, is native regional success stories, such as exit and fundraising stories. That will catalyse the sector in Southeast Asia faster, as serial entrepreneurs who have built companies in other domains will gravitate towards the sector once there are several successful companies in the education technology space. We are starting to see entrepreneurs who are looking at education in Southeast Asia as their next domain of innovation and growth.

In addition, an important element is the availability of general and sector-specific capital for the sector to support entrepreneurs. Finally, there has to be a set of service providers from consultants to lawyers to finance service providers, investment bankers and recruitment firms, which specialise in identifying opportunities in the sector that support entrepreneurship and growth.

Kaizenvest is doing its part in ensuring that the Southeast Asia education technology ecosystem continues to grow, by engaging in talks and thought leadership conversations, by working closely with start-ups on the ground in mentorship opportunities, participating in networks and foundations that assist education technology entrepreneurs to get access to early stage capital, and of course, ourselves funding companies in this domain.

In what way can EdTech help solve the problems with Education in Southeast Asia?

Southeast Asia is unique because it comprises countries and regions which range from high GDP countries, such as Singapore, to lower GDP countries such as Cambodia and Philippines. The most common problem in emerging economies in Southeast Asia with respect to education is the lack of access to education itself for some of the most marginalised segments of society. On the other hand, the most relevant problems for the developed economies, such as Singapore, are related to the quality and measurability of learning provided by the existing institutions, whether private or government funded.

EdTech can solve these problems over long periods of time, at scale, by increasingly innovative solutions that can both drive the cost of education down, and increase the measurability of learning outcomes which are delivered by the products and the systems. We have seen numerous smart companies accelerate, especially during the COVID-19 pandemic, and provide more affordable or intelligent solutions at scale to the problems of education. We have seen such solutions, in Vietnam and Philippines, in particular.

Is it possible to identify success-factors of EdTech start-ups? Is "proof of quality" possible in the EdTech sector?

This question is the most relevant question facing EdTech investors and entrepreneurs right now. EdTech, just like education, definitely has proof of quality possibilities. Now, we have data, technology and systems that can be used effectively to determine the potential effectiveness of the learning products, by measuring the level of education input such as student engagement, content quality, teacher quality, system support and customer service support levels.



Sandeep Aneja, Founder and Managing Partner at Kaizenvest

While this seems more positive, it does raise a challenge that people who are not qualified to often assess the quality of the content or the quality of the teacher, are the ones that are now in a position to assess both. This has system design implications and it is possible that content which appeals to students more may not be the best learning content at all times, and teachers who seem the most interesting through an EdTech medium may not be the most effective in driving learning outcomes at all times. However, more likely than not, good EdTech companies will generate more data, which can be used to determine the efficacy of learning better than before.

Nearly half of all investments into EdTech in the region go into Singapore-based start-ups. Why is Singapore attractive for investors?

Yes, at this moment there are, in my opinion, two major reasons why most of the regional equity investments are going into Singapore. The first reason is the stage at which the EdTech sector is in Southeast Asia. As you may have noticed, in most markets, EdTech solutions have first targeted the K-12 supplemental learning opportunity. And the most obvious and available market in the region in K-12 supplemental learning is Singapore, because it is more organised, less fragmented, and better resourced than in other markets such as Indonesia, Vietnam and the Philippines.

The second reason for most companies being in Singapore is related to talent and capital resources currently being the most prevalent in Singapore.

However, we see trends shifting, which is representative of the early days of the second phase of EdTech development in a region. Not only are we starting to see EdTech companies in other segments such as up-skilling and reskilling for working professionals and college students, language learning, and coding taking shape. Also, there are segments which are more easily tackled as regional opportunities (such as the future of work, talent management, earn while you learn) than as single market opportunities (such as supplemental learning).

We see most investors in EdTech companies in Southeast Asia are from the US. What makes Southeast Asia attractive for EdTech investors from other regions?

That is a pretty good question and I'm at a loss as well. The Southeast Asian market is so different from the US and they operate with such nuanced specialisations that I do not understand how investors from the US are so active in the EdTech space in this region. Already, for example, investors who had invested heavily in the Indonesian EdTech B2C space are realising that things are not as they appear to be and many new lessons are being learned as companies shift away from B2C to B2G, which appears to be an easier segment to realise growth, especially in Indonesia.

I am pretty sure that was not the investment thesis for the US investors who came into those companies a few years ago. Let's wait a couple of years to see how things pan out. Maybe local investors see things differently as there is no shortage of local capital.

What would be your wish to happen in the education and learning sector in the next five years?

There is one hope I have for the entire EdTech sector, which has to do with the fact that there is a real need for students to finish what they start and get value out of what they study, whether online, offline or through blended means. Therefore, I would hope that EdTech companies find a good blend between the use of technology and human-led services, including counselling and mentorship services for students whether they are K-12 supplemental learning students or working professionals looking to upskill. Because, I believe, to retain and motivate students, technology alone cannot be the answer.

Now, that there is a possibility that EdTech can bring more access to learners, it would be useful to see how these companies can leverage services thinking approach to ensure that learners get the most out of these offerings and that learners do not drop off just because technology can be quite disengaging at times. ■

INTERVIEW WITH PATRICK LIM, DIRECTOR AT ENTERPRISE SINGAPORE

What does Enterprise Singapore do?
At Enterprise Singapore, we aim to build globally competitive companies that have strong capabilities and can contribute to economic growth. In the same vein, we hope to nurture a competitive private education sector that is trusted globally. To do so, we want to forge stronger partnerships between researchers, industry and startups to develop new tech-enabled methods of learning to continuously improve and stay relevant. Concurrently, we will support the internationalisation of education and EdTech companies in markets where the demand for quality education is present.

What is the key success factor for the Singapore EdTech startup ecosystem to continue to develop?
Today, Singapore is home to over 3,800 tech-enabled startups and a network of close to 200 intermediaries, including accelerators and incubators, and over 200 VCs. While Singapore may not be a stranger to the private equity and venture capital scene, the EdTech startup ecosystem is relatively nascent.

The key success factor for a startup ecosystem typically lies in having strong participating partners, comprising incubators, accelerators, investors, researchers, and entrepreneurs. Increasingly, we are also looking towards greater involvement of industry practitioners and the education companies that can contribute to opportunities for innovation.

We recognise the importance of having the right, passionate partners who can help bridge the gap between research, ideation and eventual commercialisation. With that in mind, we anchored our first EdTech accelerator, EduSpaze, in 2019, through the Startup SG Accelerator initiative.

Through partners like EduSpaze, we aim to 1) increase the awareness and adoption of EdTech in the education industry, 2) support promising EdTech startups in building their business case; and 3) facilitate collaboration and market access opportunities for EdTech startups. To date, Eduspaze has incubated 23 startups. Nine were ranked as HolonIQ's top 50 most promising SEA EdTech Startups in 2021.

How well are EdTech solutions embedded in Singapore society? For instance, how common are public-private partnerships in Education in Singapore?
Although not frequently talked about, the education system in Singapore is essentially a public-private partnership. The education publishing industry has been providing and updating the materials our public schools use for their curriculums. EdTech companies such as Koobits, a gamified, personalised learning platform for math, also provide schools with additional supplementary materials and resources to engage their young learners.

In Singapore, the Framework for 21st Century Competencies (21CC) and Student Outcomes provides systemic guidance to ensure that our total curriculum in schools continues to prepare our young well for the future. It articulates a set of competencies, underpinned by core values to prepare our young to seize new and exciting opportunities, while overcoming challenges in the new digital age. The Desired Outcomes of Education – Confident Person, Self-directed Learner, Active Contributor and Concerned Citizen are the attributes we aspire for every Singaporean to possess by the time they complete their formal education, which will stand them in good stead in both society and the workplace.



Patrick Lim, Director,
Leisure Hospitality & Education
at Enterprise Singapore

The Ministry of Education (MOE) works with EdTech industry partners to develop innovative, user-centric EdTech solutions to enhance teaching and learning and to meet the evolving needs of students and teachers. One example is the Singapore Student Learning Space (SLS), which is one of MOE's key initiatives, to transform the learning experiences of Singaporean students through the purposeful use of technology to enable students to engage in different learning modes, including self-directed and collaborative learning.

What is the sentiment that target groups, e.g. parents of school-aged children, generally have towards EdTech solutions provided by start-ups?

The rate of adoption of EdTech solutions was slow before COVID-19. There was generally a strong belief that face-to-face interaction is more effective for learning. However, when COVID-19 forced education to be delivered remotely and even asynchronously, many previously held assumptions were challenged and educators were forced to rethink the key factors that support effective learning. COVID-19 became a two-year long, social experiment where most educators found that a hybrid model could work. With the change in mindsets within academia and increased familiarity with EdTech among parents and learners, we expect[(1)]that EdTech will be used more extensively.

The World Economic Forum reported in 2020 that, on average, students retain 25-60% more material when learning online compared to only 8-10% in a classroom (1).

E-learning, especially when personalised, is efficient as students can learn at their own pace, going back to re-read or accelerate through concepts based on their level of mastery.
This applies to both children and adult learners. A study by IAL (2) found that more than 85% of adult learners who had undergone online learning found it effective, and over 77% were able to apply their new skills in their current job.

In Southeast Asia, if not Asia, education is seen as a means that enables social mobility, and hence academic success from young is a priority for many. Hence, we do observe many EdTech solutions catering to the K-12 age group, which is also indicative of the young median age in SEA.

It is important to note that EdTech solutions cater to different education sub-sectors including Training and Adult Education, and not just tuition and enrichment. In the Training & Adult Education segment for instance, Kydon Group launched ZilLearn, an AI-powered learning and employability platform that features a range of smart tools such as rapid content creation tools and AI-generated video transcripts, and leverages big data and blockchain technology. This provides adult learners with relevant and contextualised online courses in line with industry and business needs, making it more effective for them.

We also observe that both educators and EdTech companies recognise that a structured environment is required for learning effectiveness, especially for students of younger age groups.

Hence, EdTech is rarely touted as a replacement for educators. Rather, EdTech is adopted to supplement and augment learning, and serves as an enabler that provides educators with new capabilities to better engage the learners, both young and old.

Which tips would you like to share with founders of Singaporean EdTech start-ups who have the ambition to grow into new countries across ASEAN?

Entering overseas markets comes with the opportunities but also a set of challenges that most companies would have to overcome.
Start-ups need to understand that the ASEAN market is not homogenous. Even within a single country, some cities may be more urbanised and developed, compared to others. Investing the resources to deep dive into the market(s), researching the customer profiles, preferences and the ethnocentricity would be necessary to help define the market(s) that a startup may want to first enter to make the most impact given their limited resources.

Related to the preceding point, startups need to fully understand the pain points and/or market gaps they have to address, and to localise, customise their solutions for a stronger product-market fit. Identifying a trusted local partner would help to shorten the learning curve, and to navigate cultural nuances and access opportunities.■

(1) https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

(2) https://www.ial.edu.sg/content/dam/projects/tms/ial/Research-publications/Reports/RD-2021-03_RN_Adult%20Learners%20Perception%20of%20Online%20Learning%20Due%20to%20COVID-19_20210506_Final03.pdf

OUTRO

The digital transformation of the Education sector and the evolution of learning is in progress, yet has to come far to catch up with other sectors that are much further ahead in this transition such as the Financial, Health or Food sector.

The EdTech market in Singapore and Southeast Asia is still emerging, which is evident by the very early stage that most EdTech companies in this region are in: 96% of all EdTech companies have not gone beyond Series A yet, and two-thirds are still bootstrapped or unfunded. Nearly half of the EdTech companies serve the K-12 sector (another signal of a developing EdTech ecosystem).

Especially for those countries that, pre-pandemic, already faced challenges with Education in the form of unequal access to quality learning, poor content quality and curriculum and poor teacher quality, EdTech can offer solutions. For example, by providing online courses where students (and teachers) can learn from the world's best educators, open access learning materials and tutoring, and - ideally low-bandwidth - platforms for digital skills training.

As the pandemic turns endemic, many of the solutions which focus on K-12 have great potential to help make up for additional learning losses endured in 2020 and 2021 due to school closures. It is expected that K-12 learning remain hybrid, even as schools re-open, as online solutions continue to improve accessibility to education as well as quality of education. Further, hybrid solutions will provide support should schools, and businesses, need to be remote again.

Investors, from Southeast Asia as well as from the US, recognise the upward trend and the number of investors in EdTech in SEA has increased 170% in 2021 compared to the previous year. We will have to see if this trend continues, especially in the K-12 segment, now that schools fully re-open. This may lead to declining demand for online EdTech solutions.

Nearly half of the Southeast Asia EdTech companies are based in Singapore; hence, they drive the results in this report. The strong focus on academic results by parents of school-aged kids, translate to a high number of EdTech solutions focusing on Tutoring & homework help. Test preparation is a relatively well funded segment; investors are aware that parents are willing to pay for support to get their child 'over the line' to increase their eligibility for junior college or university.

With the acceleration of the use of new technologies such as artificial intelligence, adaptive, personalised learning will be made possible for an increasingly wider group. Adaptive learning may be the approach to learning that will ultimately catch up with tutoring solutions. As such, technologies help educational institutions move away from the 'one-size-fits-all' approach that has been dominant in conventional education for generations.

The future of learning is also influenced by the "new digital economy", the economy driven by decentralised solutions where customers are in control. Customers participate and create without a strong central authority dictating what is possible and what is not. In this evolution, a general upskilling of the workforce is needed. It will also lead to more customised learning taking place, driven by 'intelligent', mobile and VR/AR technology, and the future of learning will take shape further in the form of blockchain-hosted tamper-proof micro-credentials, learn2earn concepts, or decentralised school concepts in which students vote for syllabus and content and take excursions to far-away destinations in the metaverse.

We will remain updated on EdTech developments in Southeast Asia. We are curious to see whether the strong upward trend of EdTech in Southeast Asia will continue - in particular against emerging headwinds from rapidly increasing inflation, less equity investments across industries, and global political tension.

ABOUT

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Since April 2015, Ms Gabby van Herpt has been working at the Netherlands Embassy in Singapore. She acts as a Regional Startup Liaison whereas she actively supports Dutch startups and scale-ups in Singapore and ASEAN by building and strengthening the startup ecosystem with global partners and opening doors to co-innovation with leading Dutch corporates. Prior to her work at the Embassy she founded a healthcare e-commerce company whereby she was leading the digitally transformation process from an offline to online business. In December 2017, she lead the company to a successful exit. As one of the initiators of the Startup and SME Academy in Singapore she's still involved as an advisor and active member.



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Hester Spiegel-van den Steenhoven is a Dutch education entrepreneur, venture partner and investor, living in Singapore. Four years ago, he exchanged her 15-year international career in management consulting at PricewaterhouseCoopers and Deutsche Bank to dedicate her skills to drive tech-initiatives that benefit the future of learning and talent. She started a new career in Education Technology and set up two campuses of the modern education system and coding school "42", in Germany. Based in Singapore since 2020, she is an active investor and advisor in Southeast Asia, as well as executive coach and trainer. She continues to support companies that create learning innovations, driven by a passionate belief that if we want our talent to thrive in a digital world tomorrow, we need to build the right solutions for the future of learning and work, today.









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