Promoting Education Technology in Hong Kong

Interim Report: Global Edtech Markets Studies

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Research Partner











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PREAMBLE

Education is one of the most traditional industries. We have inherited a 19th century education system with educators trained in the 20th century attempting to nurture our next generations with skills fit for the 21st century. Esperanza, a Hong Kong based NGO set up in 2018, has been advocating the need to innovate how we teach and learn.

The COVID-19 pandemic has created the momentum for change in a matter of weeks all over the world. Eighteen months after the onset of the pandemic, educators are becoming more used to the application of technology to facilitate remote teaching and learning. Similar movements are happening on the workforce development and lifelong learning fronts.

Esperanza, together with our research partners Blue Elephant Capital and SuperCharger Ventures, has embarked on a study since August 2021 to look into the EdTech market developments and in what ways Hong Kong could develop itself as an education innovation and technology hub in the Greater Bay Area of China. The study is sponsored by the Innovation Technology Commission of the HKSAR Government.

- **Blue Elephant Capital** is China's first specialist EdTech investor founded in 2015. It is passionate about the future of education industry and has been actively promoting collaboration among fudners, technology solution providers and the government in the education industry. With its intimate knowledge of the EdTech market in China, Blue Elephant is our research partner for the Mainland market.
- **SuperCharger Ventures**, based in London and Hong Kong, runs an EdTech accelerator to support the development and growth of EdTech ventures into regions like Europe, Asia, and the Middle East. It is our research partner covering the US, Europe, India, Israel and South East Asia.

This interim report offers an overview of the EdTech market developments in China, Europe, India, Israel, South East Asia and the US. It also introduces the finalists of the 2021 Edventures Global Business Acceleration (GBA) Fellowship, a programme which seeks to identify fast growing EdTech ventures that are interested in expanding their businesses and looking for partners in Asia.

The final report is scheduled for completion and public release in Q1 of 2022.

GLOBAL EDTECH DEVELOPMENTS

Introduction

Technology is a driver of innovations in all industries, from the customer experience to the delivery of offerings and the business model. Deployed effectively, technologies like mobile, immersive technologies, AI, big data, IoT and robotics can motivate, empower, personalise, track and evaluate learning. Technology can also improve the accessibility and affordability of quality education.

The COVID-19 pandemic has ushered in the world's biggest ever experiment in remote learning. The year 2020 was largely about moving learning online. With the experience last year, many educators are now looking into how technology can enhance the effectiveness of teaching and learning. EdTech can also facilitate in a significant way the reskilling and upskilling of the workforce to meet the needs of the 21st century.



EdTech Application Trends

The COVID-19 pandemic has accelerated the adoption of EdTech in a matter of months and catalysed many of the overdue changes in the education sector. In the last year, we have witnessed these major trends:

- 1. the application of technology to enable more self-directed learning and to enhance the effectiveness of teaching and learning in school
- 2. the increasing adoption of technology for professional and personal development anytime, anywhere and with people from different geographies
- 3. the mainstreaming of immersive technologies (virtual and augmented reality) for both schools and the workplace, turning the learners from passive recipients to active participants interacting with the learning environment
- 4. gamification as a means to engage learners of all levels
- 5. big data is getting bigger in helping to design, track and analyse learning, transforming education into the science of learning
- 6. the use of artificial intelligence (e.g. voice assistants, chatbots and facial recognition) to make learning more personalized, interactive and effective
- 7. growth of the B2C market with the pandemic accelerating demand for home learning and lifelong development

Investment Landscape

EdTech deal flow in 2021 looks set to outpace 2020 levels. According to HolonIQ¹, we have seen a record half year in EdTech funding with 568 rounds raising US\$10B of investment. There are 27 EdTech unicorns at the end of June 2021, 53 mega rounds (US\$100M+) and more than 3,000 funding rounds over US\$5M with a total of US\$26B deployed in the last 18 months.

The deal size has tripled that of 2020, reflecting the fact that the EdTech startups are maturing fast because of the increasing demand. Mainstream investors are recognizing that EdTech investments can reap outsized returns, similar to sectors like deep tech, health tech and fintech.

From the latest HolonIQ report (7 Oct 2021), the EdTech funding surge continued in Q3 2021, delivering 6 new unicorns with a total of 32 around the world. The quarter also delivered another 250+ funding rounds, with Higher Education and Workforce taking the largest chunk (60%). As Q4 opens, Europe has already delivered nearly 3X the funding of 2020, the United States nearly 2X while India continues an intense surge, now diversified across a cohort of market leaders.



¹ HOLON IQ, Global EdTech Funding 2021 - Half Year Update, 28 June 2021

Emergence of Blended Capital

Given the potential of EdTech solutions being able to create both financial and social returns, more and more EdTech ventures can pursue funding strategies that involve philanthropic as well as private capital. Under this 'blended capital' model, an EdTech venture may receive grants, loans and equity investments at different stages of its life cycle from both impactfirst and finance-first investors.

In some cases, foundations work together with VC firms to provide funding support to EdTech startups with innovative, scalable and measurable solutions that can address the learning needs of the less privileged groups. For example, Lumina Foundation supports American Council on Education and Credly (an EdTech startup developing digital credentialing) in a JV partnership, by offering a grant to the former to adopt the edtch solution and providing equity investment to the latter.

The blended capital model started from the US where the EdTech market is more mature with many of the foundations having a technology background (e.g. Bill and Melinda Gates Foundation). This trend is now also underway in Europe (see the example below). It is probablly time for Asian foundations to learn from their peers elsewhere.

The Jacobs Foundation (www.jacobsfoundation.org) has invested CHF 40 million to unlock the impact of EdTech globally through three major mutually reinforcing initiatives:

Learning EdTech Impact Funds (LEIF): A total of CHF 30 million is deployed through leading EdTech Venture Capital (VC) funds (e.g. Brighteye Ventures, Learn Capital, Rethink Education and Sparkmind.vc) to promote the use of evidence in EdTech among investors and portfolio companies.

Connecting the EdTech Research EcoSystem (CERES): Housed at University of California Irvine (UCI), CERES will spearhead pioneering robust open science structured around strategic learning and data sharing partnerships with EdTech companies.

Education Foundations Investing in Research and Systems Transformation (**EdFIRST**): The Foundation spearheads a fledgling alliance of leading foundations funding EdTech ventures and research to advance the industry's focus on evidencebased impact.

OVERVIEW OF EDTECH MARKETS

Mainland China



2021 marks another historical year in Mainland China's education market with the introduction of the Dual Alleviation Policy (DAP) 《雙減政策意見》. This section is an attempt to look into the impact and possible future directions of the 100 billion RMB Chinese EdTech market.

Market Overview

With over 400 million students, China is the world's largest market for educational technology. For several years, China has been a leading market for EdTech globally. As of August 2021, eight of the world's 22 EdTech unicorns (private companies valued at more than \$1 billion) are from China (HOLON IQ).

China's primary market of education raised over 10 billion USD in 2020, overseeing a 150% increase from the previous year and taking up 63% of the global education venture capital funding. It commands a significant share of the global EdTech investment.



\$48B of Global EdTech VC from 2010-2020

Regional share of Global Education Venture Capital Funding, 2010-2020 in USD Billions

From 2017 to 2019, as many as 37 Chinese education companies have gone public. They also showed strong performance in the stock market in 2020. The stock prices of the long-standing leaders, TAL education and New Oriental, increased by 40% and 50%, respectively. Those of the newcomers, Youdao (NYSE: DAO) and Genshuixue (NYSE: GSX), were up by 90% and 300%.

Analysis of the Dual Alleviation Policy

On July 24th, 2021, the complete text of *The Opinions on Further Reducing the Burden of Homework and After-School Training for Students in Compulsory Education《關於進一步 減輕義務教育階段學生作業負擔和校外培訓負擔的意見》*, also known as The Dual Alleviation Policy《雙減政策》, was officially issued by the General Office of State Council (國務院辦 公廳) and the General Office of the Communist Party of China Central Committee (中共中 央辦公廳). Education is reinstated as a society's collective, purposeful act of cultivating its citizens and the role of the public sector as the dominant provider. Education outside the public schools should play an ancillary role, focusing primarily on "elective needs of learning," "passions and hobbies," "expanding holistic qualities," etc. The after-school tutoring industry goes against the notions of equity and accessibility. The key polices affect the after-school tutoring institutions are explained below.

Subject-focused after-school tutoring institutions

- All regions shall suspend the approval of any new subject-focused institutions for the compulsory education stage. Existing institutions are required to re-register as non-profit organizations. (Article 13)
- Online subject tutoring organizations must now apply for government approval instead of filing on record. Unapproved organizations will lose their Internet Content Provider (ICP) license. (Article 13)
- Subject tutoring institutions are prohibited from providing tutoring services during weekends, national holidays, and school holidays. (Article 14)
- Subject tutoring institutions are prohibited from attracting teachers from schools with high salaries. Teachers of all types of subject-tutoring institutions must have relevant teaching qualifications. (Article 14)

Non-subject focused after-school tutoring institutions

- Local authorities shall categorize non-subject tutoring into Sports, Culture and Art, Technology and Science, etc. (Article 13)
- Non-subject-focused after-school tutoring institutions are banned from teaching subject-focused courses. (Article14)
- Schools may partner with non-subject-focused after-school tutoring institutions to provide after-school courses under the selections by the Ministry of Education. (Article 25)

Foreign Investment and Content Regulation

- Foreign investors are prohibited from holding equities in after-school subject-focused tutoring institutions through M&A, entrusted operations, franchise, and VIE structures. Investors who have already violated the terms will be cleared out. (Article 13)
- Overseas curriculum is prohibited at after-school tutoring institutions. All teaching content delivered shall adjust according to national standards. (Article 14)
- Recruitment of foreign personnel residing overseas to carry out after-school tutoring activities is prohibited. (Article 15)

Prohibition of Capitalization

• After-school subject tutoring institutions are prohibited from IPOs. Listed companies are prohibited from acquiring after-school subject tutoring institutions either through stock or cash. (Article 13)

Definition

Subject focused: Ethics and the rule of law, history, geography, Chinese, mathematics, foreign languages (English, Japanese and Russian), science (biology, physics, and chemistry).

Non-subject focused: Physical education (or physical education and health), art (or music and fine arts), and integrated practical activities (including information technology, labor and technology).

Source: Announcement on Further Clarifying the Boundaries of Subject-focused Afterschool Tutoring and Non-subject Focused Tutoring by The Ministry of Education《教育部辦公廳關於進一步明確義務教育階段校外培訓學科類和非學科類範圍 的通知》, published by The Ministry of Education

Implications and Opportunities

The Dual Alleviation Policy will bring students back to school and family, creating great potential in the markets of e-learning in the school and home setting. The after-school tutoring industry will return to a deindustrialized and destandardized state with relatively slow growth. The companies, capital and talents in this sector will expand into other new sectors in the education market in Mainland China.

New Infrastructure for Quality E-Learning

In the newly released *The Opinion on Advancing New Infrastructure in Education to Build A High-Quality Education Support System《關於推進教育新型基礎設施建設構建高質量教育 支撐體系的指導意見》*, the Ministry of Education, along with five other state departments, makes a clear statement on improving the supply of digital resources, including innovation in the instructional method, grading system, educational material development, and school management.

- Regarding instructional method, The *Opinion* mentions specifically the development of AI in smart teaching assistants and learning companions.
- The *Opinion* weighs heavily on building a digital system that focuses on the student's learning process and encourages paperless examinations.

- When it comes to educational materials, The *Opinion* encourages the use of AI to assist teachers in using digital tools and improve instructional capabilities is encouraged.
- The Opinion encourages an "all-around" digitalization of administration in schools.

Under the DAP, schools will operate longer days and seek after-school providers. There may be significant opportunities for commercial partnerships, transforming the education market from a B2C to a B2B model.

Vocational Education

The DAP states clear support for vocational education, including middle and senior vocational schools, integration between schools and the industry, and adults outside schools. However, the vast difference in the economic structure between vocational education and K12 means a different set of skills are required for the business. There will be scope for foreign participation. However, the guidelines and a pathway to operating in the vocational education market have yet to be developed.

Digital Publication

Digitization of the traditional publishing industry is now a commonly accepted trend. From digitizing published materials to generating more online content, digital publication is coherent with the nation's long-term policies for equal distribution of educational resources.

All-rounded Competency Education

Family education (such as parenting, social and emotional learning, and extracurricular activities) and sports education may be viable paths for after-school tutoring businesses that target the consumer market. The drive towards well-rounded education (such as 21st century soft skills, whole person development and wellbeing) could provide opportunities for overseas companies with proven offerings in these areas and there could be scope for international partnerships.

Foreign Expansion of Chinese Companies

China's 100 billion RMB market has fostered many market-tested businesses models and products. Successful cases of foreign expansions of Chinese EdTech companies already exist, such as ODA Class in India, which is now one of the largest brands in India's online K12 education. The DAP policy will drive more Chinese after-school tutoring businesses expanding into foreign territories.

Top EdTech Investors and Accelerator in China

Blue Elephant Capital is China's first pure-play education and EdTech investor. Founded in 2015, it has raised six funds from 50+ executive-level education industry LPs and completed seed rounds and follow-on investments in more than 90 EdTech companies.

Sinovation Ventures is China's leading venture capital. Founded in 2009 by a team led by Dr. Kai-Fu Lee, it has over \$2.5 billion assets under management between ten USD and RMB funds in total, and over 400 portfolio companies, including VIPKID, China's pioneer online language education brand.

K2VC is a USD and RMB dual currency venture capital focusing on early-stage investment in the new economy, including online, consumer goods, healthcare, and education. Founded in 2010, it has over 500 portfolio companies and has supported over 70 charity organizations and companies focusing on social wellbeing.

TAL Education Group is China's top educational technology company that offers after- school education for K12 students. The company is also China's top investor in education with portfolio companies including Minerva Schools at KGI and Himalaya.

Tencent (Mergers and Acquisitions Department) is the strategic investment department of Tencent. It has over 800 portfolio companies in total, more than 150 of which have become unicorns with a market or estimated value of over 1 Billion USD. Since 2014, Tencent has invested 4 billion RMB in over 25 education companies, including Byju's, India's EdTech unicorn.

Z-Edu is an industrial park based in Beijing's Haidian District focusing on investing, incubating, and accelerating early-stage EdTech companies. Z-Edu has over 20 portfolio companies across K12, quality education, educational services, vocational education, and more.

United States



Market Overview

The US EdTech ecosystem is one of the most developed in the world, with over 7,500 EdTech companies based there and 31% having received some form of funding. This breaks down to 1,878 companies at seed stage, 241 companies at Series A, 110 at Series B and 141 at Series C and beyond. When reviewing geographical location, there is a strong skew towards San Francisco, which is home to 30% of US EdTechs. This is followed by New York, with just 8% and Mountain View with 4%.²

² Tracxn (Database Search)



US EdTech VC Funding 2016 - Q3 2021 (\$bn)

In terms of vertical breakdown, the most prominent business model is online professional learning courses. Companies within this vertical have raised over US\$700m in the last year, with notable names such as Coursera and Udemy. Alternative financing companies offering students the opportunity to attend universities on the back of future salaries are second on this list having raised around US\$400m in the last year. There is rapidly growing demand for this vertical given how expensive higher education is in the US. Alternative financing businesses is closely followed by K-12 gamified learning, where companies have raised just over US\$300m.³

Much like other sectors, fundraising for US EdTechs is significantly inflated compared to the majority of other countries. This is shown by how high the median round sizes are: the median seed round is US\$850k, increasing to US\$5m at Series A, US\$15m at Series B and US\$40m for late stage rounds. US companies are able to attain much more aggressive valuations, allowing them to raise significantly more for similar equity stakes. This makes it increasingly difficult for non-US companies to compete in the US as similar stage companies will be at a capital disadvantage. As a result, the US is home to almost half of the EdTech unicorns globally with 10 new companies joining the list this year. These include household names such as Udemy, Masterclass and Age of Learning.⁴

³ Tracxn (US EdTech Report)

⁴ HOLON IQ, The Complete List of Global EdTech Unicorns

Top US Investors

- **GSV Ventures** is a multi stage "Pre-K to Grey" EdTech VC. It is one of the leading EdTech investors globally, and closed a second US\$180m fund in March 2021.
- Learn Capital is a California based EdTech only investor. They have invested in over 100+ EdTech startups over the past 13 years.
- **Owl Ventures** is the largest EdTech VC in the world with US\$1.3bn assets under management. They have invested in over 60 EdTech startups across the education spectrum including PreK-12, higher education and future of work.
- **Rethink Education** is the EdTech focused fund of the Rethink Capital group. They have over 80 EdTech investments with 21 exits.
- **Reach Capital** is one of the leading EdTech investors in the US. They have 60+ EdTech investments ranging from Pre-K to Professional development, including 7 exits.

Government Policy

EdTech policy within the US differs between states, but the overarching governmental organisation is the Office of Educational Technology. Their policy and strategy are covered in The National Education Technology Plan that aims to make education available everywhere all the time through the utilisation of technology.

Their most recent report was published in 2017, titled "Reimagining the Role of Technology in Education" with a new edition expected later this year (Q3/4 2021)⁵. The key focus is on equity and accessibility. Equity in education means increasing student's access to educational opportunities with the aim of reducing structural inequality, whilst accessibility refers to the design of apps, devices and environments to support and enable access to content for all.

To achieve these goals, the NETP has focused on improving the infrastructure and resources available for all stakeholders at a national level. This includes learners, teachers, developers and state leaders. Much of their work is related to providing internet access on a national scale, allowing people to learn wherever they are. Their influence in education within the US has grown significantly in recent years given the increasing move to online and blended learning models.

⁵ National Education Technology Plan (2017)

An extensive range of education grants have been made available within the US by the Government and a wide range of NGOs / non-profits. The focus of the grants fall into three main categories⁶:

- 1. Grants for innovation, such as those provided by the Institute of Education Sciences (IES), which acts as the research arm of the US Department of Education. Through the IES, EdTech businesses and research organisations can gain grant funding to progress innovation within education.
- 2. Grants for schools / teachers, such as the micro grants provided by Educators of America, which seeks to empower teachers and students across the nation. These micro grants provide teachers with the ability to upskill themselves and provide higher levels of education through technology.
- 3. Grants for infrastructure provision, such as the CARES Act Funding to support Remote Learning provided by the Office of Educational Technology. This seeks to support technological capacity and access that is used to support remote learning.

Top US EdTech Accelerators and Associations

- AWS EdStart is Amazon's Web Services accelerator for EdTech startups designed to help founders build the next generation of education solutions on the AWS Cloud.
- **CoSN (Consortium for School Network)** is a professional association dedicated exclusively to EdTech leaders working to transform learning. It has 26 chapters across 27 states.
- **Educause** is a nonprofit association and community of 100,000 academic, IT and campus professionals advancing higher education though the use of IT.
- ISTE (International Society for Technology in Education) is a US based nonprofit organization that serves educators interested in the use of technology in education on a global basis.
- **LearnLaunch** is an accelerator based in Boston. To date, they have accelerated 66 startups across 7 years with over US\$2M in capital deployed.
- **Started** is an accelerator based in New York. To date, over 100 startups have joined their programs either in person or online.

Nov 2021

⁶ Office of Educational Technology (2021)

Europe



Market Overview

VC investment into Europe has increased dramatically this year, already surpassing 2020 end of year levels. With almost half the year to go, European EdTechs have raised US\$1.6bn and will easily surpass US\$2bn by the end of the year. A large portion of this has come from a number of Series B rounds in the UK, which amounted to \pounds 140m+ invested this year and several mega rounds from across the continent.⁷⁸

⁷ HOLON IQ, Global EdTech Funding 2021 - Half Year Update, 28 June 2021

⁸ Tracxn (Database Search)



Europe EdTech VC Funding 2016 - Q3 2021 (\$bn)

This remarkable increase in investment has largely been driven by the move to online and hybrid learning models across the continent. This figure will continue to grow as the market consolidates and institutions become more comfortable with integrating technological solutions.

The rise in investment can also be attributed to a number of notable European EdTech VCs raising further funds. These include Brighteye Ventures, a France based VC announcing a US\$54m EdTech fund last October⁹ and Sparkmind, a Finnish EdTech VC announcing a new €55m Fund in June 2021¹⁰. Both VCs focus on EdTech within Europe, but are beginning to look at the opportunities outside of the continent.

There is a total of 1,307 EdTech companies within Europe that have received funding, the majority of which (1,174 companies) fall into the Pre-Series A category having raised some seed, pre-seed or angel round. This falls to 76 when looking at Series A companies, with just 57 companies raising a Series B or above. To provide some context, the median seed round between 2016-2021 is US\$745k, whilst the median Series A is US\$5m and Series B is US\$16m. In 2021, we have seen the largest number of late stage rounds (10) and the fewest seed stage (26). This gradual shift reflects the growing maturity of EdTech companies within Europe and the increasing usage of technology in education¹¹.

⁹ Steve O'hear, <u>Techcrunch</u>, October 2020

¹⁰ Sparkmind, June 2021

¹¹ Tracxn (Database Search)

The majority of EdTech investment in Europe has come in the online K-12 Academic Tutoring vertical, which received US\$333m in funding. Investment in this vertical increased by 2235% since 2020 widely due to the US\$244M Series C raised by GoStudent. This vertical also received 4 other investments outside of this (the highest number of total rounds compared to any vertical). There are currently 87 recorded companies within this vertical that have raised a total of US\$370M. The second largest vertical in terms of total funding was Online Professional Learning Courses, which totalled US\$83.8M. This consisted of 4 rounds, one of which was an US\$80M Series C from OpenClassroom. This was closely followed by the Overseas Education Loan Platforms, which raised a total of US\$77.8M across two rounds¹².

Top European Investors

- **Brighteye Ventures** is the largest EdTech focused VC in Europe having made 24 investments in the sector and recently raised US\$54M for their second fund.
- **Emerge Education** is a UK based EdTech VC that focuses on seed investments across Europe. So far they have made 17 investments across the region.
- **Sparkmind** is the first Nordic VC focused on the learning sector, investing from seed to international growth phase. They invested in 8 companies since inception in 2020 and recently raised a Eur 55M fund.
- EduCapital is a France based VC that focuses on European investments from seed to late stage. So far they have made 7 investments in Europe and achieved 1 exit.
- Nesta Impact Investments is an impact focused VC based in the UK. So far they have made 7 EdTech investments in Europe and 41 across all sectors and geographies.

¹² Tracxn (Database Search)

Government Policy

The EU has promulgated the Digital Education Action Plan, with a renewed policy initiative earlier in 2021¹³. This plan outlines the policies that the European Union are planning to enact between 2021-2027 and offers an overview of the long-term strategic goals to improve education across the region. To achieve greater accessibility and inclusion, the EU has set out two priority areas:

- 1. "Fostering the development of a high-performing digital education ecosystem": The EU will support the provision of infrastructure and high quality learning content, the upskilling of teachers and organisational capabilities.
- 2. "Enhancing digital skills and competences for the digital transformation": The EU is seeking to improve digital literacy from an early age and focusing on ensuring that girls and young women are equally represented in digital studies and careers.

To support the achievement of these two primary goals, the EU is setting up **The Digital Education Hub** to strengthen cooperation and exchange in digital education across the EU. The hub is expected to be launched by the end of 2021 and will act as an intermediary sharing best practices and supporting cross-sector and international collaboration.

EdTech policy in the UK is centralised by the Department of Education. Their most recent strategy was the "**Realising the potential of technology in education**" in 2019¹⁴. This directive outlines four key areas that the UK government has chosen to focus on:

- 1. Supporting the use of technology in education through the improvement of infrastructure, development of digital capabilities and promoting effective procurement
- 2. Helping the EdTech industry to develop ideas, test and evaluate products and grow companies both at home and abroad
- 3. Improving the Department of Education's digital services
- 4. Launching a series of "EdTech challenges" to support a partnership between the EdTech industry and education sector and to ensure product development and testing is focused on the needs of the education system

¹³ Digital Education Action Plan - 2021

¹⁴ Department of Education, Realising The Potential for Technology in Education, 2019

One of the key ways the UK Government is hoping to achieve these goals is through a newly established testbed of schools and colleges. This group of educational institutions will be used to develop, pilot and evaluate EdTech solutions.

The first phase of the program ran from April 2020 to March 2021, with the schools acting as a testbed for a number of EdTech solutions and receiving between \pounds 70,000- \pounds 150,000. The second phase of the initiative will take place between 2021-2022, with schools receiving between \pounds 10,000- \pounds 200,000 depending on the number of students and type of school.¹⁵

To supplement this, the UK Government has also set up an EdTech Leadership Group made up of representatives across the education sector and industry. This organisation will assist the government with the achievement of its strategic goals and the further development of the UK EdTech ecosystem.

Top European EdTech Accelerators and Associations

- **BESA**, the British Educational Suppliers Associations, is the nonprofit trade association covering the entirety of the UK educational suppliers sector.
- **European EdTech Alliance** is a consortium of national trade associations and clusters working with founders and providers of EdTech solutions to support the growth of the EdTech sector in Europe and beyond.
- Nordic EdTech Forum brings together founders of EdTech companies and evangelist from 8 Northern European countries: Iceland, Denmark, Norway, Sweden, Finland, Estonia, Latvia & Lithuania.
- **SuperCharger Ventures** is an EdTech accelerator based in UK and Hong Kong, focused on global expansion and internationalization of EdTech startups. Over the last 12 months, they have accelerated more than 30 startups.
- **xEdu** is an EdTech accelerator based in Finland. To date, over 40 startups have joined their program across 5 years.

¹⁵ Department of Education, The EdTech Survey: 2020 to 2021

India



Market Overview

Investment into the EdTech sector within India reached an all time high, with US\$3.8bn invested by the end of August 2021. With four months left, total funding may reach double that of 2020 levels. Interestingly, the number of investment rounds has remained fairly consistent since 2016, where 148 rounds took place compared to 137 so far in 2021. This is a clear indication of the growing maturity of the market and the investor base. This is further highlighted by the three mega rounds raised by BYJU's, a mobile-based test prep and course provider. It is considered the most valuable EdTech company in the world, having raised over US\$4bn with a valuation of around US\$16.5bn. This year alone, their fundraising amounted to US\$1.7bn across the three rounds.¹⁶

In total, there are over 9,000 EdTech companies in India, with ~750 receiving some form of funding. This breaks down into 651 companies at seed/angel rounds, 62 companies at Series A and 37 at Series B+. India is also home to four EdTech unicorns, namely Byju's, Unacademy, Emeritus and upGrad. These four companies have a cumulative valuation of US\$24.3bn and highlight the potential for the EdTech market. Between 2016-2021, the median Series A round has changed significantly. In 2016, it was just US\$2.1M, whilst in 2021 it is around US\$7.9M. A similar increase has been seen in Series B rounds, which have grown from US\$7.2M in 2016 to US\$16.5M in 2021. This dramatic increase in round size reflects the growing maturity of the EdTech market within India.¹⁷

- ¹⁶ Tracxn (Database Search)
- ¹⁷ Tracxn (Database Search)



India EdTech VC Funding 2016 - Q3 2021 (\$bn)

The regional distribution of total funding within India is heavily distorted towards Bangalore and Mumbai, receiving US\$5.7bn and US\$1.9bn respectively. With Byju's and Unacademy located in Bangalore whilst Eruditus and Upgrad are situated in Mumbai, the significant flow of investment to these regions are to be expected.

When reviewing Indian EdTech business models, there is a large sway towards online test preparation courses. This has been the case for a number of years and is due to the importance of exam results and the desire to study abroad (specifically within the US). Given the new regulation in China towards after school tutoring business, it is likely that investors will look for alternative destinations such as India. In addition, we are seeing a growing number of college education loan platforms, which provide alternative financing options and make higher education more accessible. This is specifically important within countries where there is large economic inequality as alternative loans increase the opportunity for social mobility.

Top India Investors

- **Blume Ventures** is a Mumbai based seed and early stage sector-agnostic VC. They currently have 186 portfolio companies with the majority (172) based in India.
- **Gray Matters Capital** is a VC that focuses on tech companies that are backed by corporates. They are based in the US, but 28 of their 50 portfolio companies are based in India.
- Unitus Ventures is a Bangalore based impact focused VC. They currently have 51 portfolio companies across jobtech, healthcare, education and AI.
- **Sequoia** is one of the most well-known VCs globally and is very active in India, with 248 investments within the region and 13 of which in EdTech.

Government Policy

Despite the private EdTech sector in India being one of the largest and fastest growing in the world, their governmental EdTech policy is slightly lagging behind. The most recent document released was the National Education Policy 2020 (NEP2020)¹⁸, which outlines the goals to reimagine education over the next three decades. Similar to other countries, their goals revolve around access, equity, quality, affordability and accountability. Technology is seen as central to the achievement of these goals, with a number of government initiatives being undertaken:

- National Education Technology Forum as outlined in the NEP 2020, the Indian government is looking to establish an autonomous body to drive the deployment and usage of technology within education.
- Digital India a government run initiative with the purpose of transforming India into a digitally empowered society and knowledge economy. Their work spans across improving the digital infrastructure (availability of broadband etc), providing digital services and empowering the population.¹⁹

¹⁸ National Education Policy, 2020

¹⁹ Digital India, 2021

- Digital Infrastructure for School Education (DIKSHA) a government platform to improve the digital literacy of teachers with teacher training courses, digital learning resources and assessments. DIKSHA can be integrated into teacher initiatives already being run by schools, government bodies or even private organisations.²⁰
- UDISE+ an automated information collection system that provides schools, learners and other stakeholders with real time data on their education. This has been made available to 1.5m schools, 9.6m teachers and 264m children. The system was moved online in 2018-2019 and allows for more effective school management.²¹

Top India EdTech Accelerators and Associations

- **UIncept** is an accelerator based in India, mostly focusing on EdTech. Over the last 5 years, they helped 40+ startups to grow and raise over US\$6m.
- **Marwari Catalysts** is a India-based accelerator focused on EdTech and FinTech. Till date, they have accelerated over 200 startups.
- India Didactics Association is a nonprofit membership association in India aimed at enhancing pedagogical methodologies and teaching solutions.

²⁰ <u>Diksha, 2021</u>

²¹ <u>UDISE+, 2021</u>

South East Asia (SEA)



Market Overview

In total, there are over 1,200 EdTech companies in SEA, with ~185 receiving some form of funding. This breaks down into 165 companies at seed/angel rounds, 11 companies at Series A and 9 at Series B+. The majority of these companies are registered in Singapore, which is home to 445 companies, 376 of which have received some form of funding. Singapore has established itself as a business hub in SEA given the preferable tax rates and strong governmental support for technology investment. Second on the list is Jakarta with 116 companies, which is closely followed by Hanoi with 96.²²

²² Tracxn (Database Search)



SEA EdTech VC Funding 2016 - Q3 2021 (\$m)

Investment in SEA is heavily skewed by a small number of mega rounds which dominate the statistics. In 2018, 93% of total investment came from one late stage round, in 2019 85% of investment came from four late stage rounds and in 2021 93% of investment came from 2 late stage rounds. The median seed round in SEA is just US\$250k and has remained fairly consistent since 2016, with the median Series A round at \$9m and late stage rounds at US\$50m. The size of seed rounds is likely to progress significantly over the next five years as companies start to recognise the potential for EdTech in SEA.²³

In SEA, professional learning, K-12 tutoring and test prep companies have received the most funding and are the most successful business models in the region. This is highlighted by Emeritus, the first EdTech unicorn in SEA, who provide online courses for professional development and career progression. In the K-12 tutoring space, the most notable company is Ruangguru, an Indonesia based company that closed their Series C in April 2021.²⁴

²³ Tracxn (Database Search)

²⁴ Tracxn (Database Search)

Top Investors in South East Asia

- **Temasek** is a Singapore government-owned investment company. With a S\$380b portfolio, they are one of the largest investors in the region and now also looking at EdTech with investments in companies such as upGrad and Unacademy.
- Vertex Holdings is a Singapore-based venture capital investment holding company, with 6 funds in the network and a US\$5b assets under management.
- **East Ventures** is a leading early & growth stage investor focusing on South East Asia and Japan. With 150+ active companies in their portfolio, they are one of the most active investors in the region.
- Insignia Ventures Partners is a Singapore based venture builder that focuses on Southeast Asia. They currently have 57 portfolio companies with 3 unicorns.

Government Policies

Singapore

Singapore is quickly becoming one of the leading business hubs in the world due to its favourable tax conditions and the readiness of the government to support technology businesses. This is no difference for the EdTech sector, which is one of the fastest growing in Asia. This is unsurprising given how important education is in Singapore, with 73% of Singaporean parents planning their children's education before they start their school, while 52% of Singaporeans are willing to go into debt to fund their child's education.²⁵

The Ministry of Education in Singapore released their **EdTech Plan** in 2020 to provide direction within the sector until 2030. Their main goals are to help make education more self-directed (encourage students to take ownership of their education), personalised (learning experiences that are bespoke to each student needs), connected (an increase in collaborative learning and the development of the education ecosystem) and human-centred. To achieve these goals respectively, the Ministry of Education will focus on the following approaches²⁶:

²⁵ HSBC, Value of Education (2017)

²⁶ Ministry of Education, EdTech Plan 2020

- 1. Provide personal learning devices and support for blended learning
- 2. Harness AI to enhance teaching and learning
- 3. Encourage "digital making" through robotics, coding, producing music etc
- 4. Move assessments and national exams online

The detailed plan also highlights the enablers required to implement the desired changes and growth. These include: the development of teachers capacity to educate through technology, improving digital safety of students and teachers, encouraging the role of parents and stakeholders in the learning process and creating responsive and smart environments (e.g. Classroom of the future tech).

Indonesia

Indonesia is quickly asserting itself as a major EdTech player in SEA with the rise of notable EdTechs such as Ruangguru, Zenius and Quipper. With almost 50% of the population younger than 30, there is great scope for explosive growth in the EdTech sector. However, there is a definite need for government intervention to improve the current EdTech landscape.²⁷

The problems facing the country can be split into supply and demand side issues. On the supply side, EdTech companies struggle to get funding, face high customer acquisition costs and have a limited talent pool to utilise. On the demand side, customers have a low willingness to pay and lack the digital literacy or digital infrastructure required.

The recent appointment of Nadiem Makarim, former founder and CEO of Gojek (Indonesia's first unicorn), as Minister of Education and Culture will provide confidence to EdTech companies and investors that Indonesia will continue to improve on these issues. In 2019, Makarim announced his reform package, "**Freedom to Learn**", which contains four main policy directives. Two of the policies are aimed at reforming the current school examination and assessment procedures, which has seen the termination of the national exam in 2021. While the other two policies look to reduce the administrative duties of teachers and change the current school zoning and admissions framework.²⁸

²⁷ The Oxford Business Group, The Impact of Education Technology In Indonesia

²⁸ Freedom to Learn, 2019

Interestingly, the policy reforms have similar aims to those of Singapore, with the Indonesian Ministry of Education hoping to liberate education institutions and encourage learners to be innovative and take control of their education. The ability for learners to take advantage of these policy reforms and private EdTech offerings will depend heavily on the implementation of "Making Indonesia 4.0", which was launched in April 2018 with the aim of strengthening the digital economy in Indonesia.²⁹

Malaysia

Education has been central to Malaysian government policy for many years, with their most recent blueprint being released in 2013. This provides guidance for the sector until 2025 and outlines a number of key targets for both the education system and students to achieve. For the education system, the goals outlined are: access and equity for students, improved quality of education, increased unity among students and greater efficiency when delivering education. For students, the six targets outlined are: knowledge, bilingual proficiency, thinking skills, ethics and spirituality, leadership skills, and national identity. These overall guidelines are ambitious, but achievable through the integration of technology.³⁰

The Malaysian strategy to achieve the previously stated goals is split into two sections: ministry transformation and education system structure reforms. Ministry transformation explores the need to improve resource productivity and school infrastructure, leverage ICT for education and close the implementation gap within the current delivery system. Reforming the education system structure explores reimagining the phases and duration of education (i.e. how long is spent in schools), the availability of education pathways and career options, enhancing the unity between education institutions, and involving parents, communities and the private sector into education.

To monitor the progress of the Malaysian Education Blueprint (MEB 2013), the government releases a yearly report on the current state of education and how this compares to other countries. These reports are used to celebrate the achievements within the education sector, but also to realign the goals and strategies of the government. Unlike most other governmental blueprints, it is a live document that reacts to changing circumstances. This has been especially important during Covid-19 where the response to education has needed to be agile.

²⁹ World Bank Group, EdTech in Indonesia - Ready to Take Off?, May 2020

³⁰ Malaysian Education Blueprint, 2013

Top SEA EdTech Accelerators and Associations

- **EduSpaze** is a Singapore based EdTech Accelerator that has 15 portfolio companies, providing each cohort member with up to S\$500k funding.
- **Iterative** is a YC style accelerator focused exclusively on SEA. Founded by the co-founders of Decide.com (acquired by eBay).
- **Singapore Education Network** is a membership-based network of education and EdTech professionals and organizations in Singapore and Asia.
- **SGTech** is a premier trade association for the tech industry in Singapore with close to 1,000 members. SGTech has a dedicated committee on EdTech.

Israel



Market Overivew

The EdTech sector within Israel has yet to take off in the same way as many other tech verticals have, such as cybersecurity and FinTech. This is partly because many professionals develop their tech expertise in the armed forces, which naturally tends towards security applications as seen in cybersecurity and FinTech. That being said, the EdTech market has seen a general upward trend since 2016 as the government seeks to develop the ecosystem and foster innovation. In 2016, Israeli EdTechs startups just US\$5.1m, this grew to US\$35.8m in 2018 and now to US\$69m in 2021. Similar to other EdTech markets, as the amount of funding goes up, the number of rounds fall. 2016 fundraising was split across 11 rounds, whilst in 2021 there have been just two.³¹

³¹ Tracxn (Database Search)



Israel EdTech VC Funding 2016 - Q3 2021 (\$m)

EdTech funding has already surpassed the highest previously recorded level and is expected to increase further by the year end. However, the fund raising landscape in Israel appears to be lagging behind other major tech hubs. This is partly because a number of high profile EdTech companies have chosen to relocate once they have established their market fit in Israel. With a population of around 9 million, the market is too small for large companies to continue basing their businesses there.³²

Examples of this include: Jolt, an online alternative higher education provider that rivals the traditional MBA have relocated to London to boost their growth. Sense Education is an AI and ML tool that helps educators grade open-ended assignments. Despite retaining their R&D center in Israel, it made the decision to relocate the product, customer support and business development operations to New York City. This has allowed them to raise at a much higher valuation and compete on a global scale. As a result, the fundraising figures do not accurately reflect the activity of Israeli EdTech.³³

³² Tracxn (Database Search)

³³ Tracxn (Database Search)

Top Investors in Israel

- AltaIR Capital is one of the leading Generalist VCs in Israel. With \$600m AUM, they are one of the largest and most active funds in Israel.
- **TLV Partners** is a Tel Aviv based VC firm dedicated to invest in innovative early stage startups. In 2020 they closed two news funds for \$210m.
- **Fresh.fund**, started in 2016, is positioning itself as a leading pre-seed fund in Israel. They work closely with students and Higher Education institutions.

Government Policy

EdTech policy in Israel is predominantly governed by the Ministry of Education, which is now led by Yifat Shasha-Biton who was appointed in June 2021. One of her main policies is to reduce the school week from six days down to five for ages 7-12, allowing for enrichment classes and other 21st century learning. Israel has also previously implemented a number of important EdTech policies, such as "bring your own device" (BYOD) to school and the introduction of their national educational cloud.³⁴

Outside of the MoE, The Israel Innovation Authority, a publicly funded support arm of the Israeli government, is also highly influential for EdTech policy within the country. To foster entrepreneurship within Israel, the IIA offer assistance through a range of divisions, including but not limited to³⁵:

- 1. **The Startup Division** provides support to pre-seed companies at the initial R&D phase through incubator incentives, innovation labs and early stage programs.
- 2. **The Growth Division** focuses on later stage hi-tech companies and assists with the utilisation of growth channels based on technological innovation and receiving funding.
- 3. **International Collaboration Division** responsible for the coordination of international efforts in R&D and technology transfers. Support is made possible through a range of bilateral cooperation agreements and bi-national funds.

³⁴ <u>Ministry of Education (2021)</u>

³⁵ Israel Innovation Authority (2021)

Top Israel EdTech Accelerators and Associations

- **EdTech Israel** is the national business hub that connects the Israel education sector with international entrepreneurs, investors and partners.
- **MindCET** is an EdTech innovation centre part of the nonprofit Centre for Education Technology (CET). With over 50 startups in its portfolio, MindCET runs the largest EdTech accelerator in Israel.
- **MassChallenge** is an impact-focused international network of accelerators. They accelerated 97 EdTech startups globally, including 14 in Israel.

edventures **GBA**

Global Business Acceleration Fellowship

Edventures Global Business Acceleration (GBA) Fellowship

Esperanza launched the Edventures GBA Fellowship in 2020 to identify and support growth stage EdTech ventures expanding into Asia. Congratulations to the twelves 2021 Fellows below. They are looking for funding, pilot opportunities, loclisation, channel and ditribution partners in Asia.





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