



# Emerging Giants in Asia Pacific



2022

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# Foreword

A digital revolution is driving growth across Asia Pacific, transforming the way we live, work and do business.

It is little surprise that this region is blazing the digital trail for the rest of the world:



## Demographically

Asia Pacific has a growing population, a growing workforce and a growing consumer class



## Digitally

It is home to a fast-growing population of digital natives



## Dynamically

A combination of better access to the internet, growing prosperity and improved education has created a new class of digital entrepreneurs who are uniquely positioned to identify and fill gaps in the regional market.



**Honson To**  
Chairman, KPMG Asia Pacific



**Surendra Roshia**  
Co-Chief Executive, HSBC Asia-Pacific

Driven by the network of industrial supply chains that made it the factory of the world, Asia Pacific has long been the engine of global prosperity, but two shifts are now changing its growth-profile dramatically. The first is that Asian economies that once supplied consumers in the West are becoming markets in their own right as their incomes rise. The second is that the ability to deliver products digitally has shifted the principal driver of regional growth from manufacturing to services.

By 2030, Asia Pacific's emerging growth companies will likely have a profound impact on the shape of the global economy. Already taking in over one-quarter of the world's total private investment dollars, Asia Pacific is catching up with North America as the world's number one producer of unicorns, start-up businesses valued at over 1 billion USD.

Notably, in India, more than 50 unicorns emerged in 2021 — more than in the previous five years combined.<sup>1</sup> Once confined to myth, unicorns are now bringing new prosperity to many and opportunity to millions.

A key factor in the region's continued success is strong GDP growth, particularly in its emerging market and developing economies (EMDEs): the latest IMF forecasts predict EMDE Asia will grow 20% faster than the global average this year.<sup>2</sup>

A rapidly growing middle class with higher disposable incomes coupled with rapid expansion in internet and smartphone penetration has resulted in a thriving digital commerce sector. The great migration online during the COVID-19 pandemic has energized this trend, providing a myriad of growth opportunities for start-ups.

The pandemic-accelerated shift online has opened doors for digital businesses up and down the value chain, from marketing to payments to logistics to customer experience. Led by China, Asia Pacific is now the world's fastest fintech adopter; and more and more people are exploring the potential of the metaverse and digital assets. These new ecosystems are not only drawing major investment dollars, but are also attracting some of the world's top talent and prompting governments to make major improvements in digital infrastructure.

The current wave of economic and geopolitical uncertainty is impacting the investment landscape for assets higher up the risk curve, but this can at least partially be offset — and growth supported — by the adoption of a more favorable regulatory environment and greater harmonization of policies across Asia Pacific markets. Government funding and incentives for investment in emerging growth companies play a critical role in helping local entrepreneurs start and scale their businesses.

<sup>1</sup> Forbes India, <https://www.forbesindia.com/article/startups/meet-all-the-42-unicorns-born-in-2021-the-highest-ever-for-any-year/72637/1>  
<sup>2</sup> 7.3% vs 6.1% IMF, April 2022 <https://www.imf.org/en/Publications/WEO/Issues/2022/04/19/world-economic-outlook-april-2022>



Public investments have multiplier effects as they vastly increase private investor confidence and willingness to invest at all stages of the venture cycle.

Looking ahead, the global push towards carbon-neutrality will be a major driver of innovation as traditional sectors go green. Asia will be a crucial battleground in the fight for a more sustainable future and start-ups across the region will play a key role in developing the technologies that will reduce carbon emissions and promote more responsible stewardship of the environment.

Governments are investing billions to meet their respective climate goals and the private sector is developing new sustainable investment products to facilitate this shift and respond to investor demand.

Likewise, a vast range of new technologies and services will be needed to help incumbent companies reduce and eventually eliminate their carbon footprint.

Our **Emerging Giants in Asia Pacific** joint report takes an in-depth look at new economy businesses across the region which we believe will make a lasting impact on the global business landscape over the next decade.

By analyzing economic and investment indicators in twelve key Asia Pacific markets and interviews with leading start-up founders and executives, we identify business models and success stories that stand out as leading examples for future growth; as well as the conditions that will enable these markets to continue to thrive in a constantly changing business environment.

As a world-leading professional services organization and the world's largest trade bank, KPMG and HSBC are always looking for ways to help our customers innovate, develop the solutions of the future and add value. By collaborating across markets and regions, between the public and private sectors, and between financial institutions and corporations, we aim to help companies and people realize their potential and create dynamic business ecosystems that are greater than the sum of their parts. We're proud of our work with these Emerging Giants because we believe they are a vital building block for a sustainable and prosperous future for the region.

We hope this report provides a thought-provoking window into the future of business, and we look forward to continuing the conversation.





# Executive overview

Asia Pacific is in the midst of a major business shift as fast-growing companies tap the potential of new technologies. Across the region, not only is the number of start-ups increasing, but so is their size – and their importance. Concurrently, new sector verticals are emerging that are attracting investment dollars and inspiring more and more start-up founders to enter the space.

To better understand the diversity and depth of new economy businesses in Asia Pacific, KPMG and HSBC studied 6,472 technology-focused start-ups with valuations up to US\$500 million<sup>2</sup> that we saw as potential emerging giants in 12 key markets: Mainland China; India; Japan; Australia; Singapore; South Korea; Hong Kong (SAR); Malaysia; Indonesia; Vietnam; Taiwan and Thailand.

From this larger pool of companies, we have identified the Leading 10 Emerging Giant companies for each of these 12 markets, as well as the overall Leading 100 Emerging Giants in Asia Pacific (see Appendix I).<sup>3</sup>

## Executive Overview

Consideration for these lists was based on estimated valuations and venture capital received (based on Pitchbook data figures); as well as KPMG and HSBC analysis on the future growth potential of these companies.

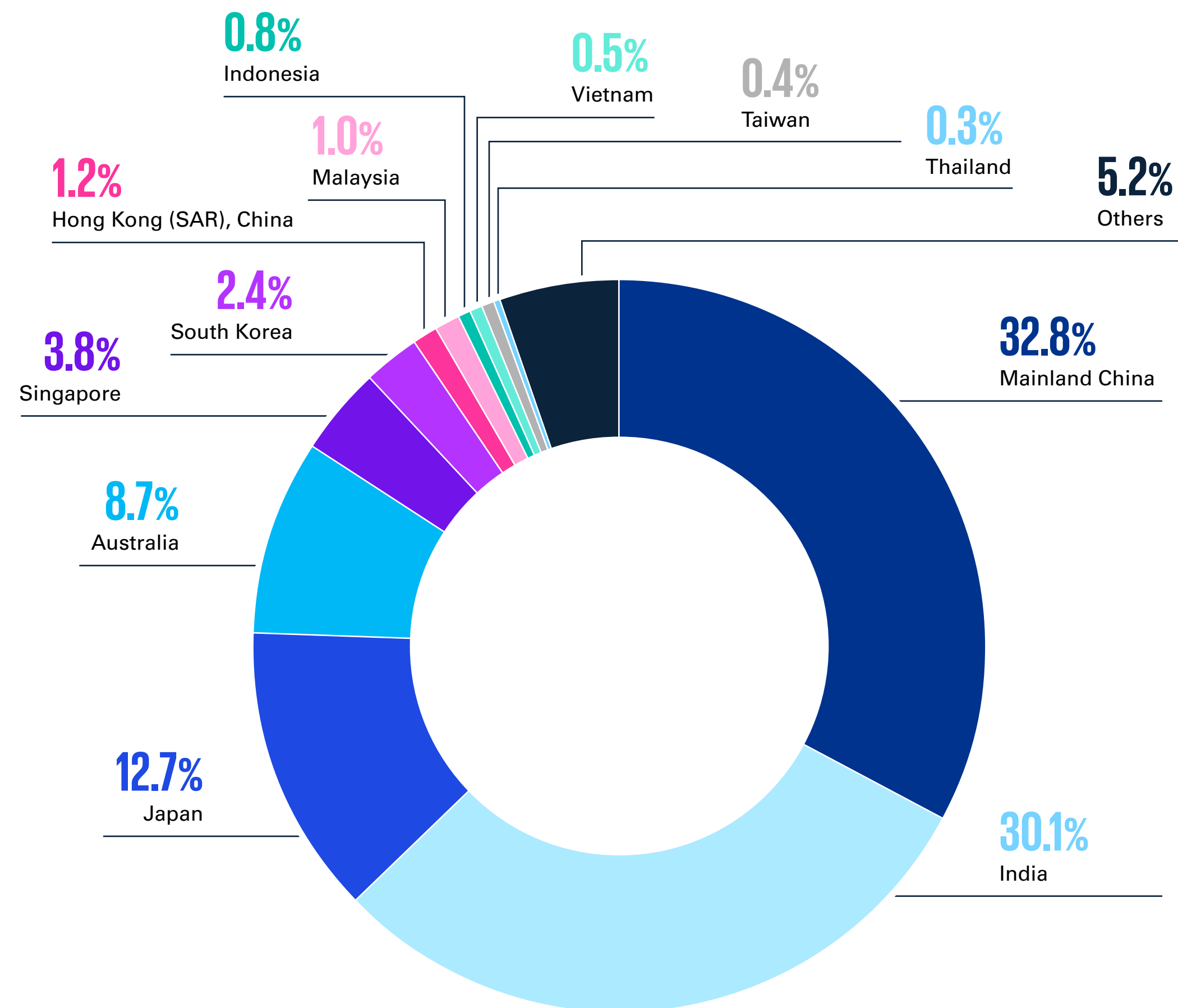
Featured interviews from case studies from each of the 12 Asia Pacific markets, based on interviews with start-up founders and executives, offer further detail on the challenges and opportunities that start-ups are facing across specific industries.

### Wide diversity by geography and distribution of funding

A large proportion of the companies we identified originated in Mainland China (roughly 33 percent) and India (30 percent), but other markets also represented a significant share. Of these, Japan comprised 13 percent, Australia 9 percent, Singapore 4 percent, South Korea 2 percent and Hong Kong (SAR) and Taiwan roughly 1 percent each. Fast-growing economies in Southeast Asia (Malaysia, Indonesia, Vietnam, and Thailand) collectively made up around 3 percent (Figure 1).

**Figure 1: Asia Pacific Emerging Giants – Breakdown by market of origin**

Percentage of companies originating in each market out of 6,472 companies identified



Source: KPMG and HSBC analysis of Pitchbook data of 6,472 start-up companies in Asia Pacific with valuations of US\$500 million or less

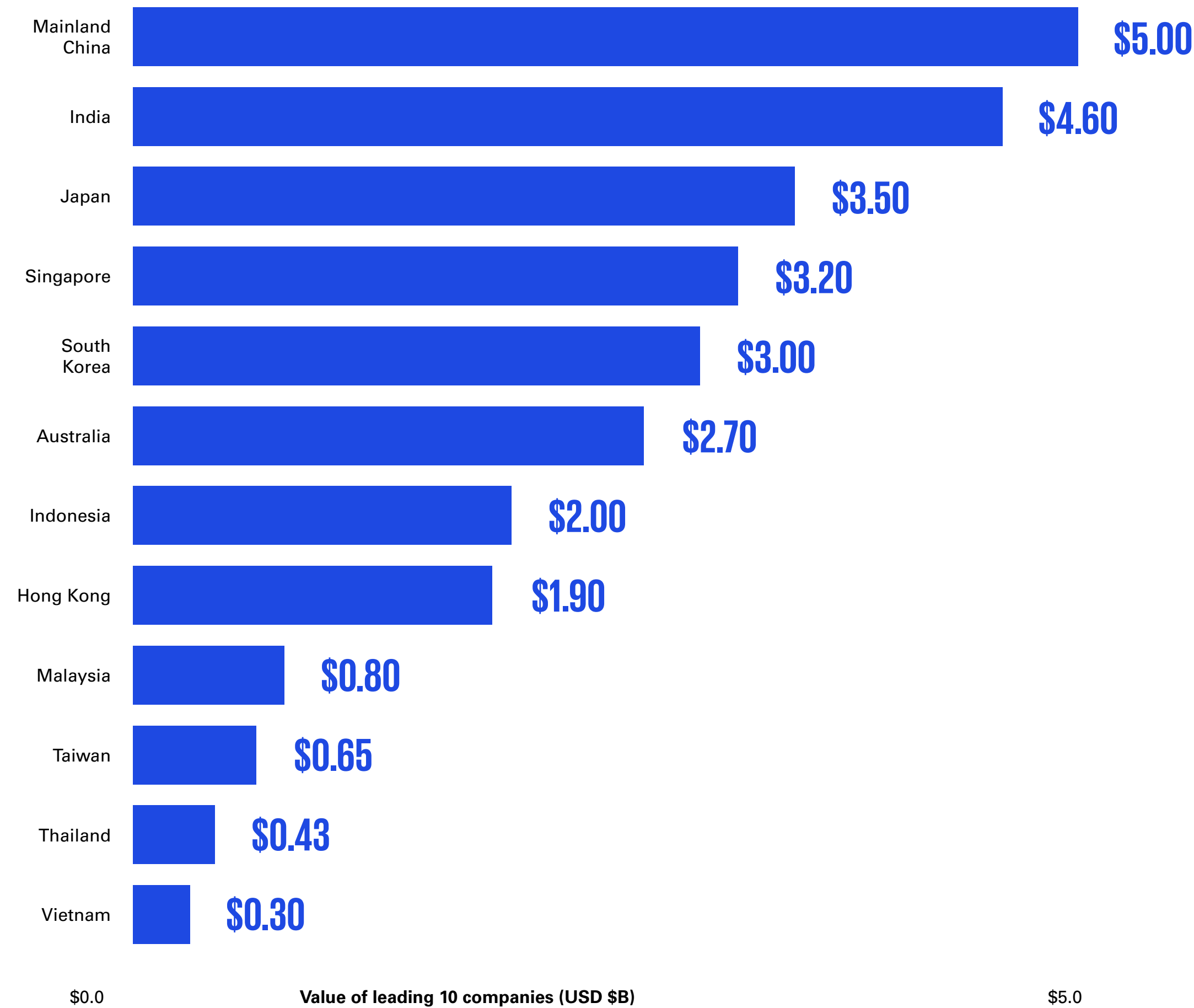
<sup>2</sup> Based on Pitchbook last reported valuations as of 30 April 2022.

<sup>3</sup> Selection for these lists is based on KPMG and HSBC analysis of Pitchbook data, referencing latest current valuations as reported by Pitchbook on 30 April 2022. Selection for these lists does not constitute an endorsement of specific companies, brands, products or services by KPMG or HSBC, nor does it constitute an evaluation or endorsement of the valuation of any company, nor does it evaluate the compliance and investability of the mentioned companies or interpret any regulatory policy. Please see full disclaimer on page 79.

Another indicator we looked at was the combined value of ten Leading Emerging Giant start-ups for each of the 12 Asia Pacific markets studied (Figure 2). While Mainland China and India were predictably near the top given the size of their economies, five out of the 12 markets had average valuations of US\$300 million or more among their ten Leading Emerging Giants, while eight out of the 12 markets had average valuations of US\$100 million or more among their respective ten Leading Emerging Giants lists. The findings represent the magnitude of high-value start-ups we're seeing in Asia Pacific, even in markets considered by investors to be less mature.

**Figure 2: Asia Pacific Emerging Giants: Value of leading companies**

Combined valuation of the Leading 10 Emerging Giant companies in each of twelve Asia Pacific markets, USD \$B



Source: KPMG and HSBC analysis of Pitchbook data of 6,472 "Emerging Giant" Companies in Asia Pacific with valuations of US\$500 million or less



Asia Pacific's emerging giants are bold, ambitious and cutting-edge in the new platform and software applications they are offering. They are courageous about who they choose to partner with, which markets they are targeting, how they shape their business models, transforming company culture and mission statements. Perhaps most importantly, they are transforming and pioneering the technology landscape over the coming years, in addition to thinking about what is useful to their customers now.

**Darren Yong**

Head of Technology, Media and Telecommunications, KPMG Asia Pacific

Even more striking is the diversity of industries we saw. Looking beyond traditional “sectors” commonly identified with new economy businesses (such as fintech, biotech, software as a service (SAAS), etc.), our joint study identified roughly 120 technology-related industry subsectors among the emerging giants we studied. The blockchain-related categories of non-fungible tokens (NFTs) and decentralized finance were most commonly associated subsectors, with over 25 percent (1,780 out of 6,472) emerging giants identifying with those verticals (Figure 3). Blockchain real estate and decentralized autonomous organizations (DAO) were also present among the top 20 subsector, reflecting the current focus across the region on digital assets, the metaverse and Web 3.0.

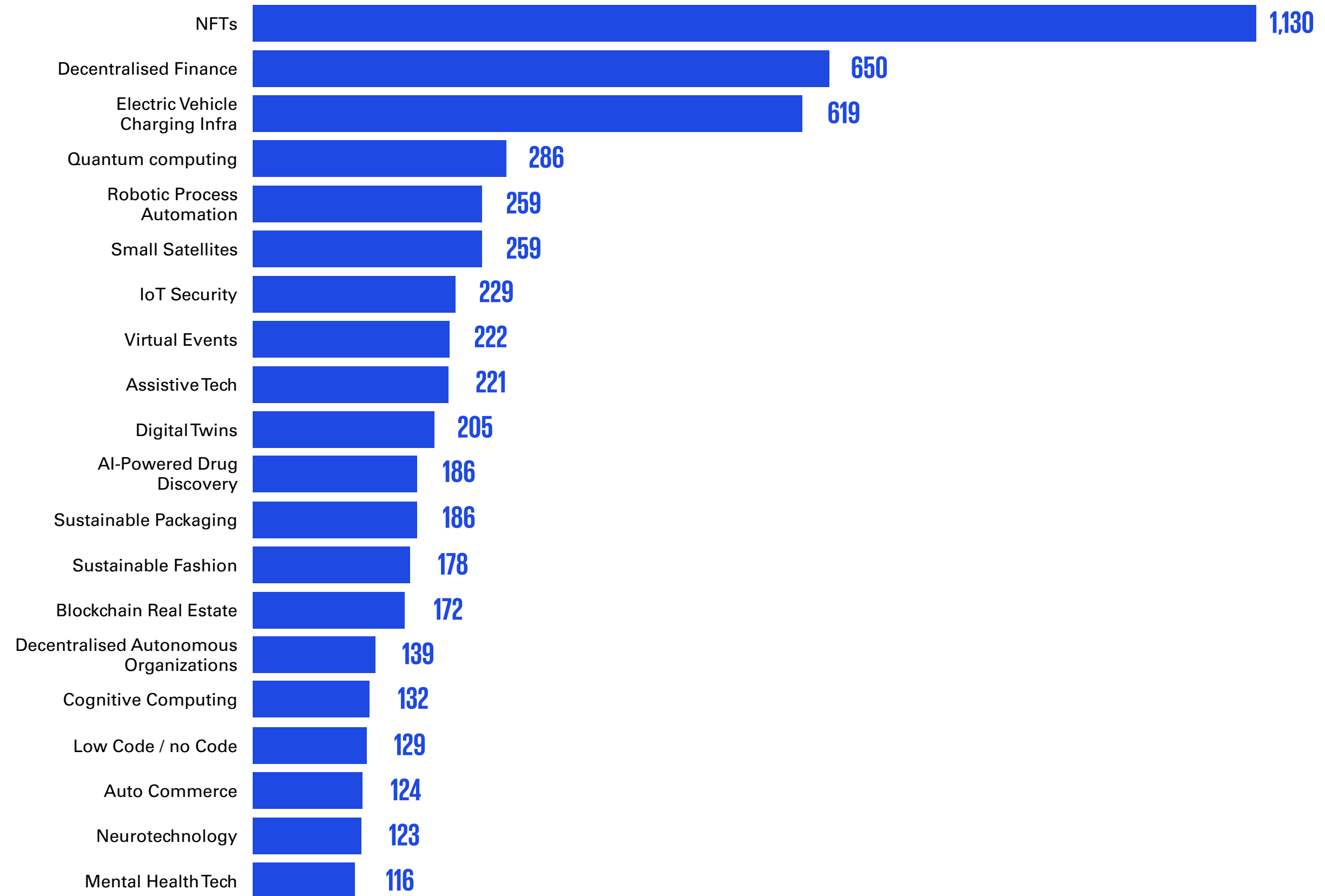
Sustainability and ESG verticals were also prominent, with three (EV charging infrastructure, sustainable packaging, sustainable fashion) included among the top 20 subsectors, making sustainability-related products and services a key focus for roughly 15 percent of emerging giants identified. The top 20 list also included four healthcare associated verticals, including assistive tech, AI-powered drug discovery, neurotechnology and mental health technology.

Meanwhile, smart city-associated areas, including IoT security and digital twins were present in the leading 10. Virtual collaboration technologies also featured prominently, with two categories, virtual events and low code/no code making the top 20 list. Advanced computing technologies were also well represented, with quantum computing making the top five, and cognitive computing making the top 20.

Executive Overview

**Figure 3: Asia Pacific Emerging Giants: Top 20 industry subsectors**

20 most prominent industry subsectors among companies identified as Emerging Giants



Number of companies that identify with specific industry subsectors (out of 6,472 total)

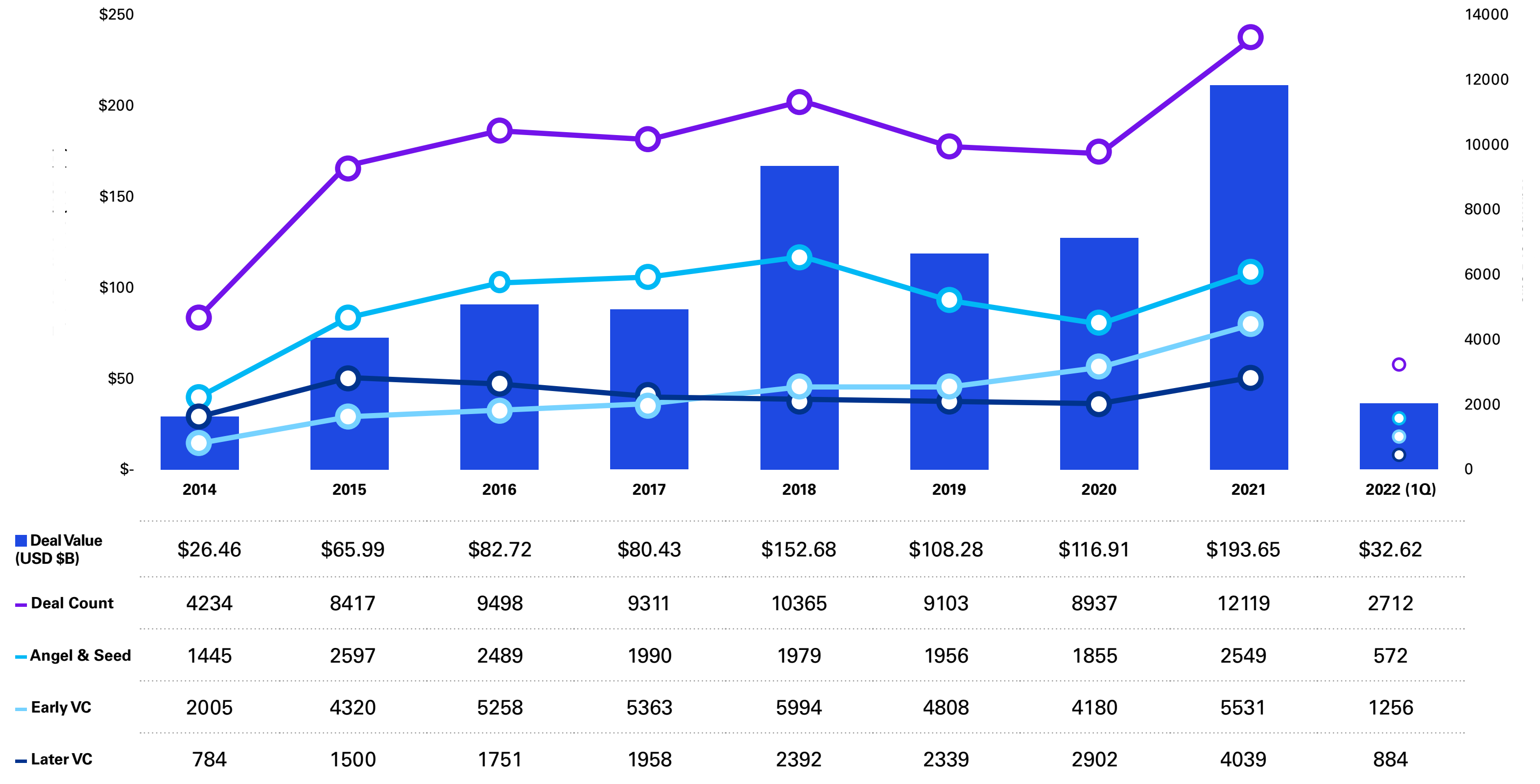
Source: KPMG and HSBC analysis of Pitchbook data of 6,472 start-up companies in Asia Pacific with valuations of US\$500 million or less; top 20 subsectors identified from 120 industry verticals associated with these companies

**Record-breaking investment in 2021, with market- and sector-specific growth expected to continue through 2022**

One immediate indicator of this new economy surge was the rise in 2021 in the region's total number of unicorns – by more than 25% to over 450.<sup>4</sup> Another was the year's record-breaking surge of private investment. Of just over US\$670 billion invested across private ventures worldwide, Asia Pacific took in US\$193 billion – over a quarter – through 12,119 transactions (Figure 4). That total was also a huge jump – 67 percent on 2020, and more than double that of 2018. That surge partly reflected a hunger on the part of investors to find new sources of strong growth that could be expected to continue as the world emerged from the COVID-19 pandemic.

But also important was the fact that large, rapid fund-raising was needed for companies to reinvest and expand, particularly across Southeast Asia, and that a strengthened investment environment, nurtured since the mid-2010s, had prepared the way for exits such as Grab's backdoor Nasdaq listing in December 2021 which gave the company a US\$40 billion valuation.

Figure 4: Venture financing in Asia Pacific, 2014-2022 (1Q)



Source: KPMG Venture Pulse Q1 2022

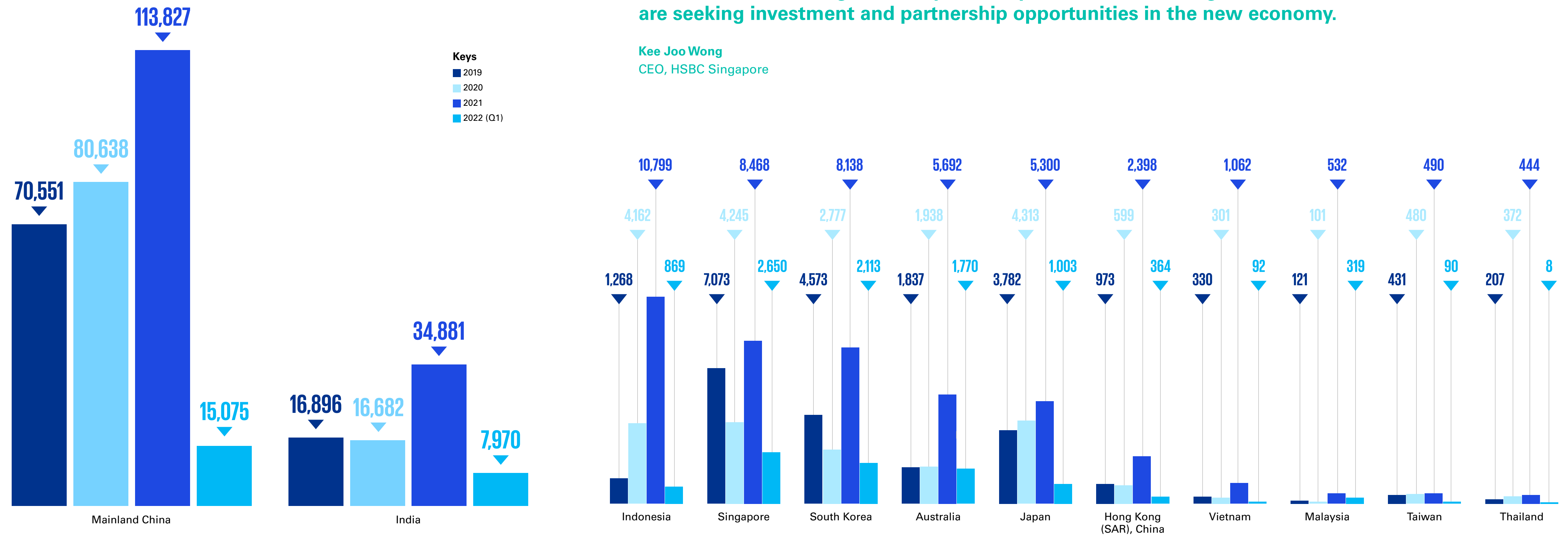
<sup>4</sup> Based on analysis of publicly available data accessed 8 June 2022. China: <https://www.chinadailyhk.com/article/253453>; India: <https://www.investindia.gov.in/indian-unicorn-landscapel>; Southeast Asia: <https://www.dealstreetasia.com/stories/se-asia-new-unicorns-2021-281120>.



Although 2022 looks unlikely to repeat the highs of 2021, 1Q 2022 figures suggest that 2022 is on target to exceed both 2020 and 2019 funding levels for Asia Pacific as a whole.

This is particularly evident in markets like Australia, Malaysia, and South Korea, where 1Q 2022 deal value has already passed or nearly passed 2020 year totals (Figure 5).

**Figure 5: Asia Pacific venture capital total deal value by market, 2019-2021 and 2022(1Q)**  
USD \$M



Source: KPMG and HSBC analysis of Pitchbook data

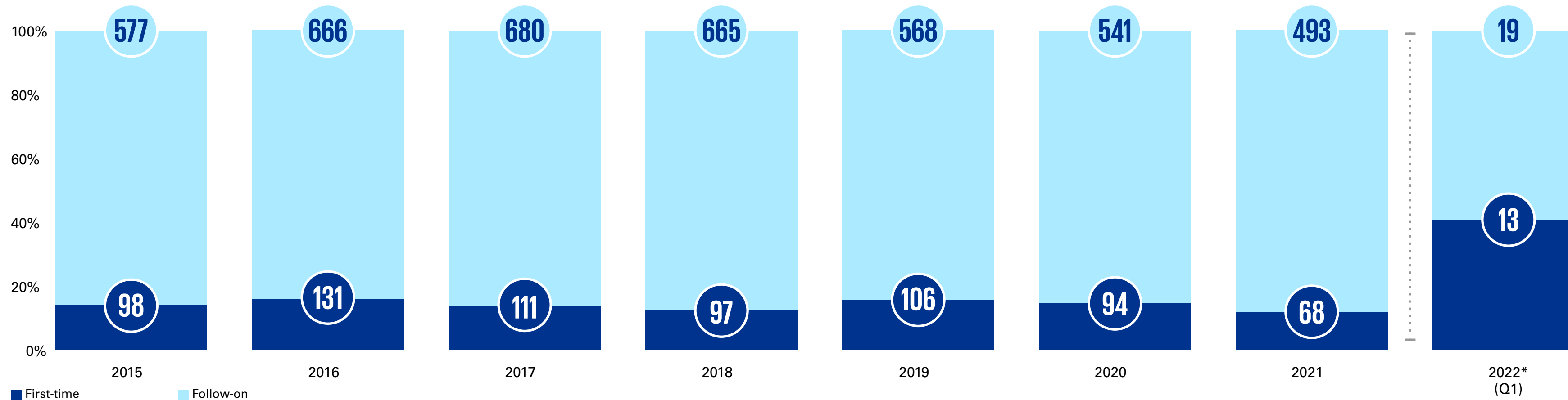


**From Singapore’s position as a global and regional financial center, we’ve observed increased interest in venture capital participation in Series A and B rounds of innovative firms in either B2B software or financial services sectors across Europe and Asia. Asset managers, family offices, private banks and high-net-worth individuals are seeking investment and partnership opportunities in the new economy.**

**Kee Joo Wong**  
CEO, HSBC Singapore

In addition, a higher proportion of first-time vs. follow-on funds in 1Q 2022 (Figure 6) was an additional sign of confidence among VC fund managers in the region that they could build on previous successes through the formation of new funds.

**Figure 6: Asia Pacific Venture Capital: First-time vs. follow-on VC fundraising, 2015-2022 (1Q)**



Source: KPMG Venture Pulse Q1 2022

### Asia Pacific: the world's growth engine

Similar to the rest of the world, social distancing measures and lockdowns during the COVID-19 pandemic encouraged a massive shift towards digital consumption in Asia Pacific markets. Across the region, as hundreds of millions of people switched to working from home and shopping online, companies scrambled to set up or expand e-commerce, e-payments, logistics and delivery platforms and online content.

Yet important as COVID-19 was in deepening reliance on digital technologies both at work and at home, the underlying reason behind the rise of digital-focused companies across the region is strong economic fundamentals, including a fast-growing middle class, differentiated markets and easy access to funding.

More than one billion Asians will become middle class by 2030, according to Austria-based World Data Lab.

China and India will lead the way, the former seeing its middle-class population, now at 900 million people, rise to around 1.2 billion people, and the latter seeing an increase of 400 million to 800 million. And making up the remainder will be Southeast Asia, led by rises in Indonesia (76 million), Philippines (38 million) and Vietnam (23 million).<sup>5</sup> Southeast Asian countries in particular have proportions of Millennials — people now aged 25-40 — and Gen Zers — aged 10-25 — many of whom see themselves as digital natives, eager to try out and adopt new technologies.

Asia Pacific's connected population will grow in tandem with the rise of its middle class. By 2025, the region will be home to more than 3 billion mobile subscribers — 1.26 billion in Greater China, and 1.8 billion across the rest of the region, forecasts the GSM Association. Though at that point the China market will be nearly saturated, with average penetration across the rest of the region only having reached 62 percent, further growth can only be expected.<sup>6</sup>

<sup>5</sup> See <https://worlddata.io/blog/china-vs-india-where-is-the-momentum-in-consumer-spending> (accessed 12 May 2022).

<sup>6</sup> Source: <https://www.gsma.com/mobileeconomy/asiapacific/> (accessed 12 May 2022).





The other reason why Asia Pacific is attracting so much attention is the variety of markets that exist in the region. Add developed financial hubs sitting alongside populous, high-growth economies to the mix — such as Singapore + Malaysia/Indonesia and Hong Kong + Mainland China — and you get magic.

Asia Pacific's digital infrastructure that permits investment is also best in class. The last decade has seen every significant economy in the region put in place the digital ecosystems necessary for a broad lift of their respective start-up communities.

In addition to traditional financing from banks, green bonds, private placements, mutual funds, crowdfunding, are plentiful. It's not just easier to get funding — there are also more options, superior opportunities, and more catalysts for stronger growth.

With funding set to continue driving expansion, the benefits will continue to accrue in the coming decade, broadening to B2B sectors and enhancing the region's manufacturing strengths. The chart on the next page identifies six key trends to watch in the coming year.



**Across Asia Pacific, venture capital investors are showing heightened interest in companies working to improve traditional manufacturing processes or providing software-as-a service (SaaS) B2B services. There is also growing interest in the number of different technology-focused sectors, including new energy vehicles, semiconductors and hardware-related technologies.**

**Egidio Zarrella**  
Partner, Clients and Innovation, KPMG China



## Asia Pacific new economy businesses: Six key trends



### Region-wide growth

China will remain Asia Pacific's dominant new economy force, but its importance will be rivalled by India as a source of digital innovation, while Southeast Asia, thanks to the expected growth of its middle classes, will establish itself as the region's other major digital market.



### B2C now; B2B soon

Consumer-facing companies and fintechs will continue to attract the largest share of investment as e-commerce, payment, delivery and personal finance platforms – often combined as “super-apps” – are rolled out to serve the region's emerging markets. But as markets mature, attention will turn more and more to higher-value-adding B2B start-ups in areas such as enterprise productivity, education, healthcare and clean-tech. Australia is pointing the way forward in many of these areas.



### Demographic drivers

The continuing growth of Asia's middle classes, and especially the emergence of Gen Z consumers will be the biggest single factor driving digital economies across the region. But though societies with younger demographics and larger populations will be the forefront of change, as Japan is showing with its “Society 5.0” model, Asia's more prosperous, ageing societies, too will also be rich sources of innovation.



### Localized business models

The region's many distinctive societies, economies and politics will lead to proliferation of localized business models. Malaysia, for example, is set to enhance its already strong position in Islamic finance, while in Indonesia, a host of social commerce start-ups are using local knowledge to grow their businesses across the country's many underserved islands, echoing China's Pinduoduo which built its e-commerce empire by concentrating on lower-tier cities.



### Manufacturing spill-over

Robotics and automation are transforming factories. Rapid prototyping is allowing companies to develop new goods faster and at lower cost. Blockchain and tracking technologies are facilitating efficiency, traceability and transparency along industry supply chains. The region's manufacturing and exporting strengths, especially those of East Asia, will be further enhanced by new digital technologies.



### ESG on the rise

As the region moves to address climate change, opportunities to expand the reach of new economy businesses will arise as entire economies embrace the need to track and analyze carbon emissions, install and operate smart renewable energy systems, replace fossil-fuel powered transport networks with electric ones and put in place green finance solutions to pay for all these.



**With a fast-growing and digitally-native middle class, Asia Pacific will continue to be the world's growth engine. Combined with a very dynamic business environment, this presents tremendous growth opportunities for businesses that can leverage the rapid digitization of this vast ecosystem.**

**Dan Roberts**

Global Head of Business Banking, HSBC





### Platforms, super-apps

The biggest immediate impact of this mobile-first development is entire economies leapfrogging directly to the forefront of the digital era. In China, the shift from cash to e-payments took place over a decade, starting with computer-based applications, then moving to smartphones. In Southeast Asia and India, mobile devices combined with mobile broadband have similarly accelerated adoption. Vietnam's leading e-wallet MoMo for example, has seen its user base jump from 10 million in 2020 to 25 million and expects to reach 50 million by the end of 2023.<sup>7</sup>

Across the region, the arrival of smartphones and internet penetration have given rise to super-apps – mobile applications which bundle together multiple functions into one easy-to-use platform. China's Alipay and WeChat were the two original super-apps, the former making itself the country's biggest payment app thanks to its integration with Alibaba's online marketplaces, Taobao and TMall, and the latter adding a digital wallet, e-commerce, gaming and many other functions to its original chat function.

Now, this model has been replicated across Asia's biggest markets. Singapore-headquartered Grab and Indonesia's Gojek both offer multiple services to users in countries across Southeast Asia.

In South Korea, Kakao has established itself as the market leader with 47 million users, or nearly 90% of the population.<sup>8</sup> Vietnam's Zalo likewise has leveraged its position as the country's top messaging app to make itself one of the top three e-wallets. India's market is still being contested, but the most likely winner is Alibaba-backed Paytm, an e-wallet integrated with shopping, travel, insurance and other services.



**Asia Pacific will soon be home to half a billion tech-savvy, socially aware Gen Z consumers.**

**Anson Bailey**

Head of Consumer & Retail, Asia Pacific; Head of Technology, Media and Telecommunications, Hong Kong, KPMG China



<sup>7</sup> Reuters, 21 December 2021, <https://www.reuters.com/article/vietnam-fundraising-momo-idCNL4N2T60N8>.

<sup>8</sup> Kakao IR Presentation, November 2021: <https://www.kakaocorp.com/ir/referenceRoom/earningsAnnouncement?lang=en>



### Fast-growing fintech adoption

Asia Pacific, led by China, is the world's biggest fintech adopter, with tools taken up on a wider scale than anywhere by both consumers and businesses. The pandemic only served to accelerate this. What we've seen in the past two years is probably equivalent to the digital adoption of previous five years, with the scale of transformation in financial services outpacing other sectors.

In China, at least nine out of 10 urban residents use WeChat Pay or Alipay as their main payment mechanism. As other locations in the region have rolled out super-apps, sophisticated fintech applications have become available, leading to widespread uptake with consumers and businesses. In Indonesia, for example, the government reports that 90% of internet users over age 18 have already purchased goods online.<sup>9</sup>

Considerable interest has also shifted to cryptocurrencies.

Although crypto trading is currently not permitted in Mainland China, crypto adoption has surged in Hong Kong SAR and Singapore, as well as some emerging markets, including India and Vietnam. Across the region as a whole, in 2021 crypto transactions rose eight-fold compared with the previous year, accounting for 14% of the world total, according to the 2021 Chainalysis Global Crypto Adoption Index.<sup>10</sup> One outcome was the creation of two unicorns, Amber Group in Hong Kong and Singapore's Matrixport, both crypto financial services providers.

Blockchain companies have been even more successful. Among the blockchain players to emerge were Vietnam's Sky Mavis, a non-fungible token (NFT) game developer, South Korean digital asset exchange owner Dunamu, and Chinese distributed ledger company Hyperchain.



**Platforms are not only transforming how start-ups and companies operate but enabling the flow of financial services to the point of need to empower and enable customer and supplier relationships.**

**Aman Narain**  
Global Head of Platforms, HSBC

<sup>9</sup> See <https://www.trade.gov/country-commercial-guides/indonesia-ecommerce> (accessed 12 May 2022).

<sup>10</sup> Source: <https://blog.chainalysis.com/reports/2021-global-crypto-adoption-index/> (accessed 12 May 2022).



### Government support for new economy growth

Government support for the new economy is strong across the region. South Korea has a Ministry for SMEs and Start-ups, while Hong Kong and Singapore both have government bureaus dedicated to attracting and supporting start-ups. India's Start-up India Initiative, which has granted tax benefits to around 50,000 start-ups since its launch in 2016; and the Malaysia Digital Economy Corporation (MDEC) has now been supporting ICT and digital economy growth for more than a quarter of a century, to name just some of the agencies backing new economy businesses in Asia Pacific.

Financial regulators in many jurisdictions are especially friendly. The Monetary Authority of Singapore, for example, through its Singapore Financial Data Exchange, has created a platform through which individuals can plan and manage their finances, but also — with their consent — share it securely and in compliance with regulations with banks and other businesses wanting to create new services. The Hong Kong Monetary Authority, Hong Kong's central bank, has been running its Fintech Career Accelerator Scheme aimed at expanding Hong Kong's fintech talent pool since 2016.



<sup>11</sup> KPMG, "Catalyst for change: Sustainable finance developments across Asia Pacific", July 2020, <https://home.kpmg/cn/en/home/insights/2020/07/catalyst-for-change.html>.





**We believe the transition to ESG-driven finance will lead to the reinvention of many product lines creating a powerful tailwind for sustainability-native companies. We also see wealth creation in Asia as an enduring trend that will benefit technology companies across wealth management, capital markets and insurance.**

**Kelvin Tan**  
Head of Sustainable Finance and Investments, ASEAN, HSBC Singapore

### ESG opportunities

Governments and new economy businesses will also likely collaborate to confront the challenge of climate change.

Already, around the world pressure is growing for environmental, social and governance (ESG) factors to be placed at the center of business and investment strategies, and Asia Pacific is no exception.

China, Japan and South Korea, for example, have all pledged to make themselves carbon neutral, the latter two by 2050, the former by 2060. Turning these pledges into reality means investing in people and the community by building their ESG knowledge base. And herein lie the opportunities.

First, an often neglected part of ESG – education. Providing the foundation and training for the community/businesses/employees – all the relevant skills needed to flourish and grow within a low carbon economy is fundamental. If markets understand how ESG impacts their business models, this will have a knock-on effect to any related transition strategies.

These transition strategies and other environmental goals will call for an extraordinary burst of innovation across almost every industry, from manufacturing and transport to data analytics and finance.

China will likely be a leader in this space. Its current Five-Year Plan (2021-2025) prioritizes green development, demanding change across its energy, manufacturing, heavy industry, construction and mobility sectors, with the goal of increasing the share of non-fossil energy in its total energy consumption to around 20% by 2025 from 16% in 2020.

For Asia Pacific jurisdictions to meet their climate goals, they will require a host of new technologies and processes, supported by massive amounts of funding. For example, to meet the UN's Sustainable Development Goals by the target year of 2030, the UN Economic and Social Commission for Asia and the Pacific (UNESCAP) estimates that Asia Pacific will need to spend US\$1.5 trillion annually, the equivalent of 5% of GDP.<sup>11</sup>

That in turn will drive demand for related technologies and services in green finance. In Hong Kong and Singapore, for example, the financial sector increasingly needs businesses able to generate and analyze the investment-grade ESG data they need to ensure compliance with reporting requirements.



### The talent challenge

One of the most pressing challenges for many businesses in all parts of Asia Pacific is securing the talent needed to drive growth, considering the high demand for technical talent in particular among the region's start-ups.

Left unaddressed, shortages could limit opportunities. However, two key factors are likely to mean talent shortages will be less of a problem than many fear: First is the declining relevance of location.

Continuing advances in communications combined with the widespread adoption of remote working and global take-off in video-conferencing due to the COVID-19 pandemic has made outsourcing software development easier than ever before.

Secondly, one of the key objectives of new economy businesses is eliminating inefficiency. In manufacturing, that means replacing factory-floor labor with robots; in services businesses it means using technologies such as robotic process automation (RPA) that can handle repetitive or formulaic tasks.

Of course, technology cannot deliver productivity gains without people with the skills necessary to produce it. Yet already the incentives are in place for those sectors and companies which can deliver the greatest returns — be that in money or performance — for them to attract the talent they need, wherever that talent is based. In the future, a key issue will be how to retain key talent, putting the onus on companies having the appropriate human resource management processes and skills to manage distributed workforces.

### Asia Pacific's future-makers

The accelerated adoption of new technologies during the pandemic has upended existing practices and habits, including how people work, shop, consume information, attend schools and universities, and receive public services. This massive shift has opened up opportunities for many types of companies — not only pure digital businesses, but also traditional industry players which needed to embrace new digital ways of operating.

As we explore in the 12 market-specific sections of this report, technology-focused companies across the region are carving out focus areas in line with these macro changes. A few examples include content creators in South Korea, who found new audiences for their webtoons in the US. Australian B2B business services providers expanded their global reach,

finding businesses across the region in need of their apps. And Indonesia and Thailand's start-up ecosystems had a landmark year in 2021, minting four new unicorns between the two countries.

Looking to the future, Asia Pacific's Emerging Giants — high growth and high potential businesses currently valued at US\$500 million or less — will reshape the ways in businesses operate and people manage their daily lives across Asia Pacific in the years to come.

The follow-on effect will be continued transformation of the region's economies, including broadening and deepening its manufacturing hubs, strengthening and increasing transparency across supply chains, and ultimately boosting the service sectors on which the region's future prosperity will rest.





# Key takeaways

The ongoing COVID-19 pandemic, current conflict in Ukraine, supply chain disruptions and rising energy costs are all contributing to uncertainty that has affected the global economy. Despite these factors, Asia Pacific remains a growth-oriented region.

Though venture capital investment in 2022 is unlikely to eclipse 2021 levels, the region's strong take-up of digital services, led by China, India and Southeast Asia, is expected to continue to accelerate the growth of technology-driven businesses across the region.

## Seizing opportunities

The heightened pace of digital adoption during the COVID-19 pandemic created innumerable opportunities for technology-focused businesses. The ever-shifting environment and sporadic outbreaks of new COVID variants continue to disrupt global trade and supply chains. But the scale of the digital transformation now underway — and the availability of funding supporting that transformation — is expected to continue to support the growth of technology start-up ecosystems.

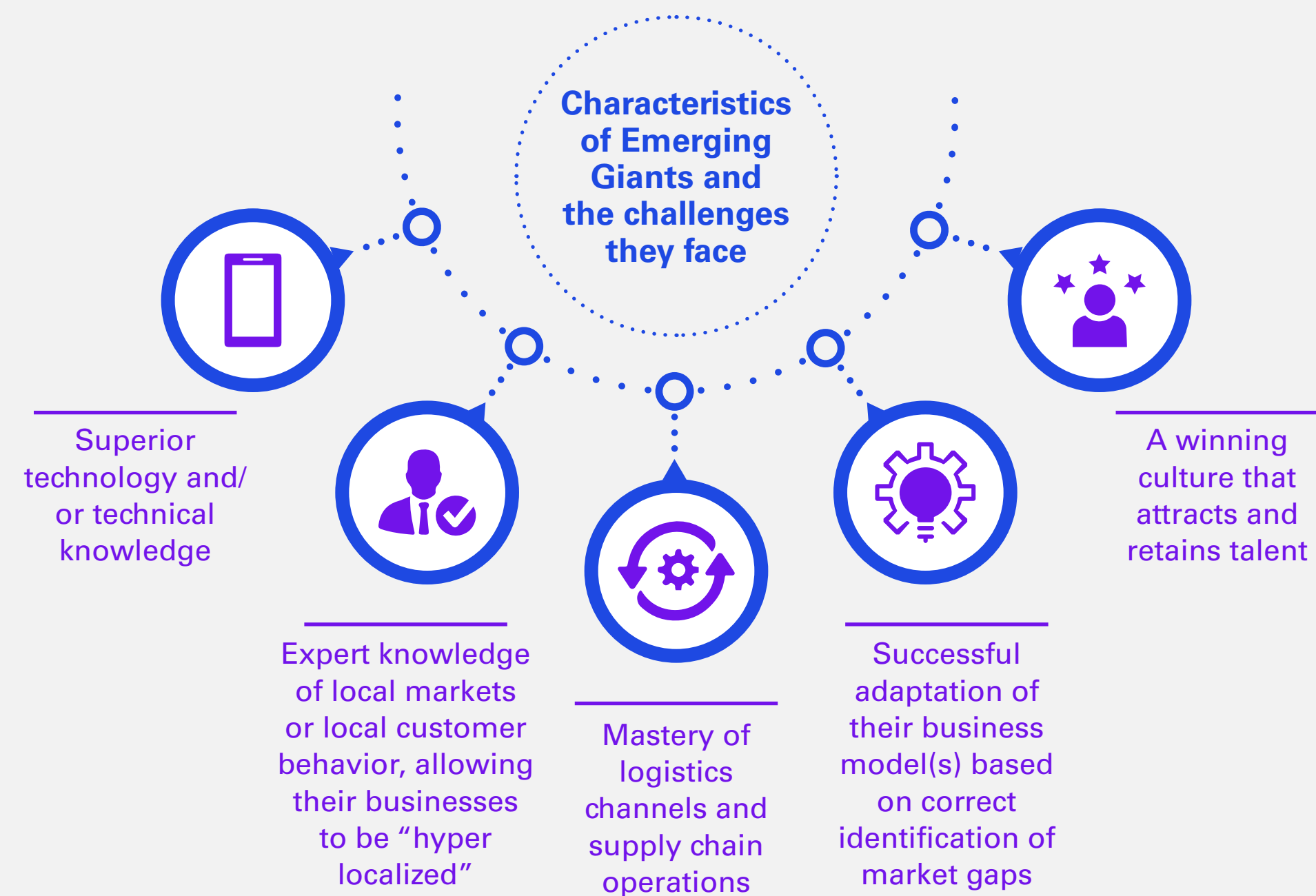
This is evidenced by the wide geographical range and funding distribution among our Asia Pacific Emerging Giants list.

As Darren Yong, Head of Telecommunications, Media and Technology, Asia Pacific for KPMG, explains, Asia Pacific's emerging giants are bold, ambitious, and cutting-edge in the types of products and services they offer, who they choose to partner with, which markets they target, and in how they shape their business models, company culture and mission statements.

Many are intertwining ESG and sustainability with their service and product offerings. Other are using advanced data analytics to understand customers better than competitors. Firms are pursuing innovative solutions to risk and compliance challenges to get ahead of the pack in their respective markets. But most importantly, in addition to what is useful to their customers now, companies are thinking about what the technology landscape will look like ten or twenty or thirty years from now.

### Characteristics of Emerging Giants and the challenges they face

While there is no specific formula to be an "Emerging Giant", the companies we identified were standout players in a wide variety of disciplines, including one or more of the following:



Challenges abound but one of the most common observed by start-ups and corporates alike, is the uneven distribution of technology talent across markets. The more successful companies are focusing on local specializations. For instance – India's software development strengths; China's capabilities in piloting and testing digital platforms; and Australia's rapidly growing body of specialized B2B start-ups that offer solutions to shortages faced in other markets.

Hong Kong and Singapore remain two major gateways to the region, particularly for Greater China and Southeast Asia. Elsewhere, notably in India but also in Japan and South Korea, potential participants are more likely to want to explore ways to access markets or companies directly.



### Partnerships and working with regulators

Our discussions with start-up businesses suggest that many see the benefits of partnering together with corporates to address respective challenges faced. Collaboration is a win-win, with start-ups gaining access to market exposure and customers while corporates obtain innovative technology solutions that can help improve their business operations or access new markets.

However, success can weigh heavily on choosing the right organization(s) – and the right team(s) – to partner with. KPMG and HSBC research suggests that corporates who see start-ups as collaboration partners as opposed to service providers or vendors have a higher likelihood of successful outcomes. Further, the terms of cooperation, including ownership of intellectual property and autonomy offered to start-ups to develop solutions, may correlate with improved results.

### Tax and ESG considerations

Another consideration as start-ups scale their businesses globally is regulatory complexity, particularly the rapid evolution of government regulations in response to the rise of digital businesses.

Concurrently, global taxation developments such as global base erosion and profit shifting (BEPS) measures will shape the minimum corporate tax rate in participating markets, therefore affecting where multinationals choose to base their operations.

More stringent ESG regimes, including net-zero targets being put in place by jurisdictions globally, will require companies to more closely track the ESG impact of their businesses up and down the supply chain and effectively communicate their ESG footprint to investors and the general public. As today's Emerging Giants aspire to become tomorrow's unicorns, formulating effective ESG and tax strategies will be a cornerstone for future growth.

### Support to scale up

Furthermore, in all of the markets we studied, governments continue to be supportive of new economy expansion, with a wide range of measures and schemes to attract founders, investors, and talent. Equally important are incentives for businesses to invest in local R&D and partner with local universities to commercialize research.

### Key takeaways

In order for younger start-ups to have a greater chance to overcome the “valley of death” while scaling their businesses, they will need to take full advantage of government schemes and funding, which in turn will help to attract commercial investors and mentors who can guide these businesses to the next level.

### Daring to think big

For every billion-dollar unicorn, there are thousands more companies that fail. And yet the allure, excitement and thrill of becoming the next Grab, Foodpanda or Binance remains. It always starts with a seed of an idea, followed by thinking big, being disruptive and executing with full passion. We believe the Emerging Giants that we have identified in this report embrace these principles. We wish them every success as they continue on their growth journey.





# Australia

Australia is home to one of Asia Pacific’s most global and fastest-growing start-up hubs. New economy ventures in the country boomed in 2021, with venture finance hitting US\$5.3 billion, nearly 2.8 times the amount invested in 2020.<sup>33</sup>

“The pandemic sparked growth in digital start-ups which hasn’t stopped,” says Amanda Price, Head of High Growth Ventures at KPMG Australia. “When COVID hit, companies realized almost immediately they had to digitalize to be able to cope. But a lot of the infrastructure put in place was temporary, that process is now going to continue as people figure out what’s really needed and put it in place.”

After China and India, Australia is home to the largest number of technology start-ups in the region: nearly 18,000, according to data platform Tracxn.<sup>34</sup> At the top of its current list of eight unicorns is Sydney-based Canva, a global online graphic design platform which in 2021 raised US\$200 million at a US\$40 billion valuation.<sup>35</sup>

Fintech start-ups account for the biggest share of start-ups – around a quarter – and with along with software start-ups have been the biggest recipients of funding. By value, the two sectors accounted for just over a third of all investments in 2021.<sup>36</sup>

Other important sectors include health-tech, ed-tech e-commerce, mining technologies and multiple B2B niches, among them new digital services for business productivity, marketing, record keeping and storage, human resources and property.



## Key economic indicators



**25 million**  
Population



**108.0**  
Mobile subscriptions per 100 people



**US\$51,693**  
GDP per capita



**21 million**  
Internet users



**27 million**  
Mobile subscribers



**84.0**  
Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	2.3	2.9	2.1	0.0	3.8	4.1

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), OECD (GDP 2022f), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>33</sup> See <https://home.kpmg/xx/en/home/campaigns/2022/01/q4-venture-pulse-report-global.html> (accessed 12 May 2022).

<sup>34</sup> See <https://tracxn.com/d/soonicorn-awards/top-start-ups-in-australia-tech-2021> (accessed 12 May 2022).

<sup>35</sup> See CB-Insights, “Global Unicorn Club: Private Companies Valued at \$1B+ (as of April 6th, 2022);” downloaded from <https://www.cbinsights.com/research/1000-unicorns-list/> (accessed 22 April 2022).

<sup>36</sup> See <https://www.australianstart-upfunding.com/> (accessed 12 May 2022).



## Leading 10 Emerging Giants

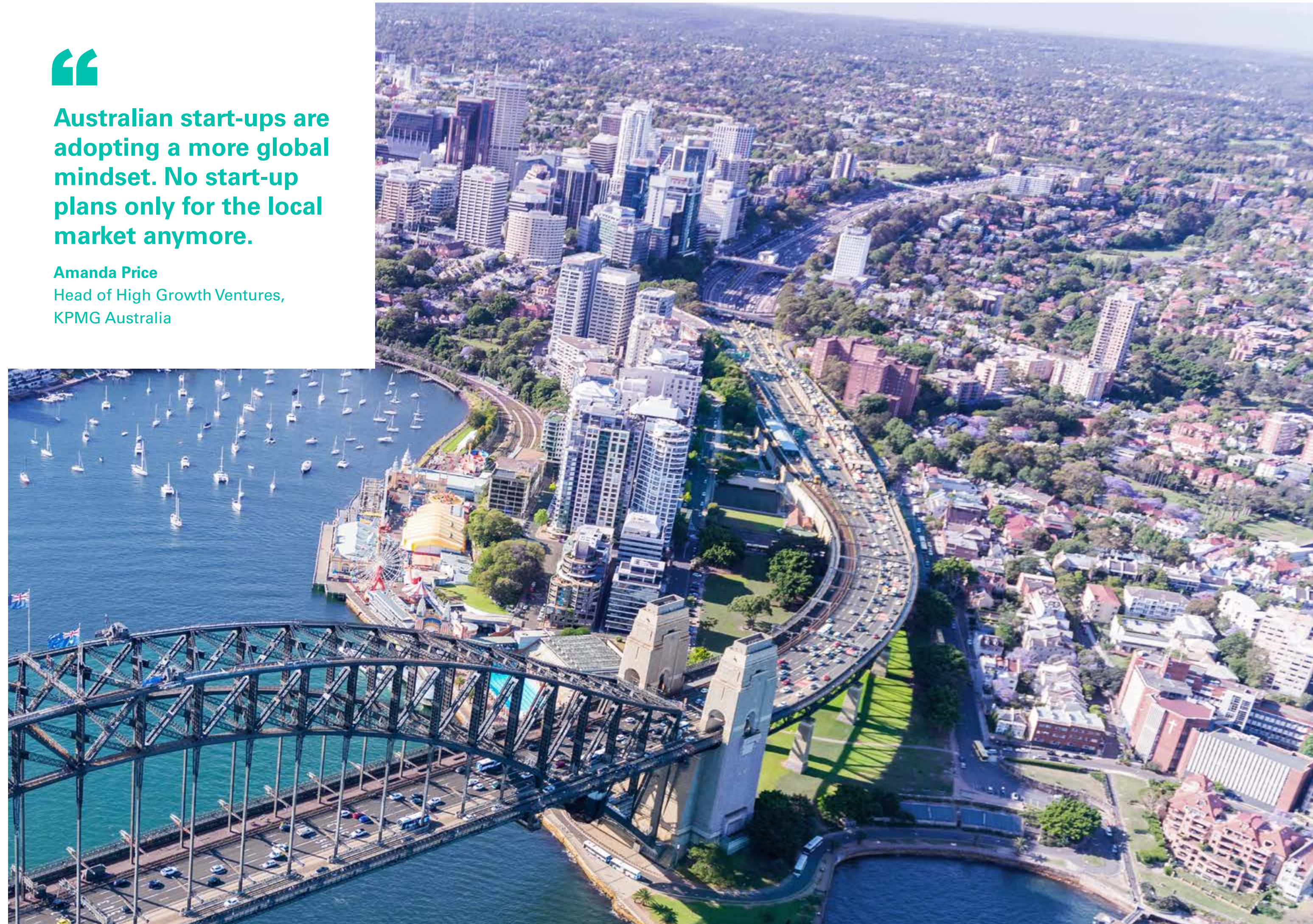
	Sector	Business
1	<b>Finder</b> FinTech	Platform that enables users to compare financial products.
2	<b>Pentana Solutions</b> Advanced Manufacturing, MobilityTech, SaaS	Enterprise resource planning services for automotive and distribution space.
3	<b>Omniscient</b> Artificial Intelligence & Machine Learning, CloudTech & DevOps, Mobile	Software solutions for neurosurgery, neurology and neuroscience.
4	<b>Eucalyptus</b> Digital Health	Healthcare technology company building digital experiences for patients.
5	<b>Easy Crypto</b> Cryptocurrency/Blockchain, FinTech	Cryptocurrency retail platform offering customers a safe, secure and simple way to buy, sell and trade more than 150 cryptocurrencies.
6	<b>Alpha Fintech</b> FinTech	Cloud-based payment-processing platform for connecting merchant buyers and vendor suppliers across the entire payment lifecycle.
7	<b>GBST Holdings</b> FinTech	Financial technology and administration services for capital markets and the wealth management sector.
8	<b>Harrison.ai</b> Artificial Intelligence & Machine Learning, HealthTech, TMT	AI-based healthcare platform for commercializing affordable healthcare products and services.
9	<b>Secure Code Warrior</b> CloudTech & DevOps, Cybersecurity, SaaS	Developer of an online secure coding platform designed to provide cyber protection for in-house and outsourced developers.
10	<b>Avocado Guild</b> Cryptocurrency/Blockchain, FinTech, Gaming	Developer of a play-to-earn blockchain gaming platform intended to inspire non-fungible token (NFT) gamers.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**Australian start-ups are adopting a more global mindset. No start-up plans only for the local market anymore.**

**Amanda Price**  
Head of High Growth Ventures,  
KPMG Australia







### Abundant funding

The country's start-up ecosystem is supported by abundant early-stage funding from local investors, supplemented last year by the arrival of substantial money from international sources as overseas investors participated in one-quarter of all deals – and increasingly by corporate backing too.<sup>37</sup>

"The rise in international investors coming here is great for founders, as with competition increasing, so are valuations," says Price.

Sydney and Melbourne form the two main pillars of Australia's start-up ecosystem – the former is home to 67 accelerators and incubators, benefitting from the presence of six leading universities; while the latter is home to 39 accelerators and incubators.<sup>38</sup>

Melbourne's top start-ups include payment platform Airwallex, small business lender Judo Bank, employee analytics platform CultureAmp and social media firm LinkTree, which in March 2022 became Australia's newest unicorn.

At the top of Sydney's list are safety app developer SafetyCulture, a platform which helps companies improve work practices, and blockchain fintech Immutable.

Other cities across the country are also starting to see a greater start-up presence. Brisbane, for example, is home to corporate training platform Go1, which acquired unicorn status in mid-2021 after closing a US\$200 million funding round.

"Australia has traditionally had big spending on R&D, but hasn't been as good at commercialization – that's changing," says Price. "We're not just seeing more start-ups and more investments, we're also seeing corporations starting to understand that start-ups are a real thing," she adds.

### Looking to Asia for growth

Also changing are the markets companies are targeting. Although Australia's start-up ecosystem remains culturally aligned with the US and the UK, more and more businesses are looking more to Asia than ever before, with Australian companies seeing Singapore as a jumping off point for Southeast Asia in particular.

"There is less talk about bootstrapping these days," says Price. "It's all about having the most aggressive growth possible." With both domestic and international funding expected to keep rising in 2022, Australia's new economy looks set to maintain its rapid pace of expansion.

<sup>37</sup> See <https://www.australianstart-upfunding.com/> (accessed 12 May 2022).

<sup>38</sup> See <https://tracxn.com/d/investor-lists/Accelerators-&Incubators-in-Sydney> and <https://tracxn.com/d/investor-lists/Accelerators-&Incubators-in-Melbourne> (accessed 12 May 2022).



## Featured interview Airwallex

**Location:**  
Melbourne

**Co-founder & CEO:**  
Jack Zhang

**Sector:**  
fintech / cross-border payments

**Launch:**  
2015

**Customers:**  
20,000

**Offices:**  
13

**Workforce:**  
1,200

**Revenue run rate:**  
\$100 million

**VC:**  
\$802 million including \$100 million at \$5 billion valuation in 2021

**Key investors:**  
Lone Pine Capital, Sequoia Capital China, 1835i Ventures, Tencent, DST Global, Square Peg

Source: Interview with Craig Rees, SVP, Global Head of Platforms, for Airwallex in Melbourne

Airwallex is an end-to-end digital fintech platform for businesses of all sizes to transact locally and globally. Airwallex can handle online payments, manage treasury, issue multicurrency cards, and its software can handle expense management, bills and data analytics. Airwallex has licenses and approvals across eight key jurisdictions where it operates including Australia, Hong Kong, Malaysia, Netherlands, New Zealand, Singapore, United Kingdom and the United States. The company became a unicorn in 2019, and grew by 200 percent in 2021.

### What are the company's main products?

We have a range of products that enables us to offer a well-rounded service that can assist businesses with all their financial needs. For SMEs who are looking to grow globally, we offer a business account as a web application or mobile app that lets them run and operate better on a global scale. For our platform customers who are larger, and tend to be tech or digital natives, we offer a fully embedded API suite.

### What pain point(s) does Airwallex solve?

Modern companies are growing their business in a highly complex, fragmented and regulated environment. We simplify incredibly complex processes so that customers can focus on growth and don't have to be experts in global finance. Our platform is low cost, high speed and expandable.

### What are your primary customer markets?

WealthTech is a big one, also the creator economy, and marketplaces such as e-commerce sites, online travel and education payments too.

### What's your strategy for going global?

We started growing our business in Asia Pacific. We're now bringing our expertise internationally, including to the U.S. Still, the majority of our customers are from APAC. We think the U.S. will be as big as APAC. We launched in the U.S. in August 2021, and in a few months' time, nearly doubled the team to 50 people across product and engineering, legal, risk and compliance, partnerships and sales. We also recently made two senior hires in the U.S., and appointed a new GM in EMEA as well to really drive our international growth.

### Will some of the new funds be used for acquisitions?

For the right opportunities, absolutely. We have essentially built out our own infrastructure — our network and our products are digital-native and multicurrency native. So it's fundamentally very difficult to do acquisitions on that. Where we can look for opportunities are those companies that can build software on top of our financial infrastructure.

As we look at growing regionally and globally however, we are always on the look-out for teams when entering a new region or offering a new capability. Last year, we acquired UniCard Solution in Hong Kong to offer a new service for the city's retailers.

### What new innovations are you working on?

We're looking into lending, and think we can launch a credit solution in the next 12 months. We are also exploring crypto. We're looking at it as more of a product that enables crypto trading.

Also, we are expanding our expense management to track and reconcile business and employee expenses in one place. And we're embedding customized payment links within invoices and emails for easy collection.

### Can you provide some examples of innovations with partners?

In the UK, we recently partnered with Plum to power a new stock investing feature they were launching, which allows for their customers to trade in U.S. stocks.

More broadly, we also work with Visa, and have rolled out our Borderless cards across multiple markets - from the US, UK, to Australia and Hong Kong.

### Where are your innovation hubs?

San Francisco is one of our newest innovation and engineering hub, it came on board in the last six months, alongside Melbourne, Sydney, Shanghai and Amsterdam.

### What's the biggest challenge?

Talent in the market is in high demand. It's not easy to hire globally right now. We are all fighting for the same talent.

### How did Covid impact business?

Since we specialize in online payments, rapid industry transformation in part due to the pandemic has had a positive effect on our business. Covid has accelerated the process of moving from physical money to digital payments from a 10-year process to six months.

### What's on the agenda for liquidity? IPO?

Not at the moment. Private markets are supporting us in our growth, and we think that is the best route right now.

### Will company be acquired, say by Stripe? PayPal?

We're just looking to grow ourselves and who knows what is around the corner. We are deploying that funding, growing those teams and doubling down on growth.

### What aspects of your company culture set you apart from the crowd?

We truly have a team that believes in the vision that Airwallex stands behind. We want to connect entrepreneurs, business builders, and makers with opportunities in every corner of the world.

Our executive team is also dispersed across every continent. We always have someone working while someone else is sleeping. I believe that's one of the reasons we have been and will continue to be successful.



# Mainland China

Mainland China's huge and intensely competitive digital economy continues to produce dynamic new companies at a rapid rate. In 2021, it added some 50 unicorns, taking its total to more than 300.<sup>12</sup>

A number of factors are driving the continued expansion of new economy businesses, including is the country's huge domestic market, the government's current effort to make China a global innovation leader by 2035, and the rich experience gained by the country's technology companies over the last two-plus decades.

China has a very high tech-literate population with very high mobile phone and internet penetration rates. A majority of the population now shops online, with around nine out of 10 of all e-commerce sales carried out through mobile devices.<sup>13</sup>

To support its long-term technology aspirations, China spends heavily on research and development – with R&D spending reaching CNY 2.79 trillion (US\$435 billion) in 2021, up 9% on the previous year, and the equivalent of 2.4% of GDP, according to official figures.<sup>14</sup>

Investment flows continue to be huge, with total venture capital funding of US\$106 billion in 2021, up nearly a third on 2020, including seven of the top 10 financings in Asia Pacific in the year's last quarter.<sup>15</sup>



## Key economic indicators



**1,439 million**

Population



**117.9**

Mobile subscriptions per 100 people



**US\$10,435**

GDP per capita



**1,011 million**

Internet users



**1,696 million**

Mobile subscribers



**70.3**

Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	6.9	6.8	6.0	2.3	8.1	5.1

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>12</sup> China Daily, <https://www.chinadailyhk.com/article/253453>.

<sup>13</sup> See <https://www.economist.com/business/2021/01/02/the-next-big-thing-in-retail-comes-with-chinese-characteristics> (accessed 12 May 2022).

<sup>14</sup> Source: [http://www.stats.gov.cn/english/PressRelease/202201/t20220127\\_1827065.html](http://www.stats.gov.cn/english/PressRelease/202201/t20220127_1827065.html)

<sup>15</sup> KPMG, Venture Pulse, Q4 2021, page 89.



## Leading 10 Emerging Giants

	Sector	Business
1	<b>BioMind</b> Artificial Intelligence & Machine Learning, HealthTech, Oncology	Medical platform that uses artificial intelligence technology to provide fast and accurate diagnosis assistance for brain tumors and vascular diseases.
2	<b>HIPAC</b> E-Commerce, TMT	E-commerce platform that provides products for mothers and their babies.
3	<b>HuoMaoTV</b> Esports, Gaming	Live stream platform for e-sports gaming.
4	<b>One (China)</b> E-Commerce	E-commerce platform selling professionally curated consumer products.
5	<b>VisionNav Robotics</b> Advanced Manufacturing, AgTech, Artificial Intelligence & Machine Learning, Autonomous cars, Internet of Things, Manufacturing, Robotics and Drones, Supply Chain Tech	Automated guided industrial vehicles for intralogistics and warehousing.
6	<b>Avatar Technology</b> Artificial Intelligence & Machine Learning, Autonomous cars, CleanTech, MobilityTech	Autonomous and controllable intelligent electric vehicle platform offering customers intelligent vehicle products.
7	<b>Hongquan CRM</b> Big Data, Marketing Tech, SaaS	SaaS mobile sales management cloud services for enterprises in China.
8	<b>Zhiyan Technology</b> Artificial Intelligence & Machine Learning	Smart home products.
9	<b>Jimu</b> FinTech, TMT	Online platform offering peer-to-peer (P2P) lending services.
10	<b>Kuro Game</b> Gaming, Mobile	Entertainment software

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**More and more investment is going to ESG – mainly to fast-growing technology companies doing things such as R&D into environmentally friendly plastics, new materials and other products.**

**Daniel Chan**  
Head of Technology, Media and Telecommunications, KPMG China





## New directions

What is changing, however, is where that money is going. “In the past, venture capital investment in China largely focused on consumer-centered businesses. Now we’re starting to see B2B and hardware companies getting a lot more attention,” says Allen Lu, Partner and Head of Technology, Media, and Telecom Audit at KPMG China.

Among the sectors benefiting are advanced manufacturing (especially of semiconductors), AI, robotics and automation, new materials and industrial software and internet services.

The key reason for this is the new rules introduced by the government to bring order to the sector by clamping down on anti-competitive behavior and also improving working conditions for staff.

“Tighter government regulation is creating a more controlled but fairer business environment,” says Daniel Chan, Head of Technology, Media and Telecommunications, KPMG China. “This is encouraging more new players to thrive.”

Official support for technology start-ups remains strong. The country’s current Five Year Plan, covering the 2021-25 period, envisages core digital economy industries accounting for 10 percent of GDP by 2025, helped by public and private R&D spending rising 7 percent annually.

To counter the impact of COVID-19, the central government has also increased policy support for science and technology innovation companies and advanced manufacturers with tax cuts further tax deductions for R&D spending and VAT credits.

And investment in IT infrastructure also continues to be strong. “The 5G ecosystem now being rolled out in China will drive further change,” Chan says. “We’re going to see more B2B products and solutions built around this 5G backbone.”

China’s goal of having an economy with net-zero carbon emissions by 2060 is another promising area for growth, with ESG-related sectors seeing high investment flows. Assets in Chinese climate funds market grew by nearly 150 percent between 2020 and 2021 to US\$46.7 billion, according to financial services firm Morningstar.<sup>16</sup> Especially popular are companies in electric vehicle manufacturing, renewable energy, while new ESG measurement and reporting standards for listed companies are stimulating the emergence of a host of “green” fintech firms.



**With new regulations aimed at the tech sector, China is promoting entrepreneurship, rather than discouraging it. It’s shifting the focus from the bigger companies to smaller ones, and from internet businesses to hardware ones.**

**Allen Lu**  
Partner and Head of Technology,  
Media and Telecommunications Audit, KPMG China



<sup>16</sup> See <https://www.morningstar.com/articles/1088297/climate-funds-dig-deeper-roots> (accessed 12 May 2022).

<sup>17</sup> See [http://english.www.gov.cn/policies/policywatch/202201/20/content\\_WS61e8a11bc6d09c94e48a3f04.html](http://english.www.gov.cn/policies/policywatch/202201/20/content_WS61e8a11bc6d09c94e48a3f04.html) (accessed 12 May 2022).





### Multiple ecosystems

Beijing—with its Zhongguancun Science and Technology Zone, home to China’s biggest cluster of unicorns—remains the country’s top start-up hub. But similar ecosystems have established themselves in a string of other cities across the country, among them Shanghai, Shenzhen, Guangzhou, Hangzhou and Chengdu.

Local governments are also supporting digital transformation in factories and workplaces. In January 2022, the State Council, China’s Cabinet, unveiled the country’s first five-year plan on the digital economy, which included measures backing the role of data as a production element as well as promoting the digital technologies in industry.<sup>17</sup>

While competition for talent is intense, the rise of the country’s digital economy over the last two decades has created a large body of businesses and executives with rich experience of managing fast-growing start-ups.

Some of these executives are now leaving those companies to set up a new generation of businesses.

And while most start-ups will continue to focus primarily on their respective domestic markets, more and more successful companies are now drawing on their experience in China to enter and catalyze similar markets overseas. Southeast Asia is a particular focus.

Already, companies such as Alibaba and Tencent have a major presence through investments in some of that region’s top tech start-ups, Indonesia’s GoTo, and Singapore’s Lazada and Sea Group.

Looking ahead, China is expected to remain Asia Pacific’s new economy powerhouse. The next few years look set to see major new companies emerge in large numbers across new sectors, complementing its many already existing giants, and helmed by a new generation of entrepreneurs looking to emulate – or possibly surpass – their predecessors.



**China’s digital economy has expanded the market space of agriculture, industry and service industries, and the scale reached \$6.72 trillion in 2021, accounting for 39.8 percent of GDP. Even with a tightening regulatory environment in some of the online industries, there are still very significant growth opportunities.**

**Irene S Zeng**

Head of Global Liquidity Cash Management, HSBC China



## Featured interview Geek Plus

**Location:**

Beijing

**Founder:**

Yong Zheng

**Launched:**

2015

**Markets:**

Asia, Europe, North America /  
30 countries

**Employees:**

1500 +

**Market sector:**

robotics, logistics

**VC:** \$200 million

**# of global customers:**

500

**Orders:**

\$300 million in 2021

Source: Interview with Marie Peterson,  
VP, International Business Development &  
Marketing, Geek Plus

Geek Plus well represents the tech-savvy type of start-up that has originated from China in recent years with a young, ambitious founder. Its journey in advancing manufacturing and robotics tracks the development of e-commerce globally and massive growth in adopting mobile robots for warehouses and logistics centers. The robotics process automation (RPA) market grew 38.9% in 2020 to \$1.9 billion, one of the fastest-growing enterprise segments.

**How has the company evolved from its Chinese origin to becoming global?**

In 2015, we launched during the 11/11 Singles' Day shopping festival in China. The next year, we began deploying our robots for leading Chinese e-commerce brands. International expansion began in 2017 followed by projects in Japan and elsewhere in APAC. In 2018, we opened offices in U.S. and Europe. Now, 70 percent of our business is outside China.

**Given that the e-commerce market is growing so fast, how have you pinpointed expansion areas?**

We tracked the early adopter markets first, then to U.S. and Europe, which have been slower. Our growth is linked to the increase in e-commerce and huge warehouses handling orders. China is our global hub.

It has advanced, complex manufacturing and a high level of digital consumers.

**What is the business model?**

We develop smart warehouse solutions based on mobile robots that we market to e-commerce and retail warehouses, as well as manufacturing logistics covering retail in consumer electronics, cosmetics, food and beverage and many other market sectors. Our customers are regional leaders and Fortune 500 companies. We work with the top 10-12 retailers in each country.

This allows customers to be flexible and agile to track seasonal differences in ordering or to handle sudden peaks rather than having a fixed automated system.

**How has this business model been extended?**

We own and operate a large network of warehouses. We also own and operate two smart factories where robots make robots – the world's first robots-making-robots factory. We work with partners, such as system integrators and distributors, to scale our growth.

**What is your customer promise?**

We're committed to offering real value to enterprises to build their competitiveness and strengthen operations: a 1-3 year return on investment, 2-3 times efficiency improvement, 99.99 percent accuracy, and 1-3 months deployment. We offer a full range of after-sales support services such as system maintenance, training, 24-hour technical help desk, and remote and on-site support.

**How does the pricing model work?**

It's customized according to need. Our average size order is over 100 robots equipped to work in warehouses that are thousands of square meters in size. Purchases can work from a full range of logistics robots solutions to rent a robot to fully automated warehouses, to integrated distribution.

**What is the major pain point you solve for customers?**

There is a labor shortage and the number of warehouses are growing. The cost to hire workers has also doubled in the last few years.

**What are some examples of company innovations?**

We have more than 900 patents, and more than half of our staff are product engineers.

We cover a full range of intelligent warehousing and flexible manufacturing, such as robot shuttles that improve efficiency by two to three times and achieve rapid ROI. The robots automatically move shelves or pallets based on smart algorithms. They can combine orders, adjust inventory layout, and handle parcel picking by bin or by piece. We've also launched two high-density solutions that work as micro-fulfillment services in inner cities.



# Hong Kong SAR, China

Hong Kong remains one of the best locations in Asia Pacific to launch and grow a new economy business. Indeed, throughout the COVID-19 pandemic, its buoyant start-up sector continued to expand, raise funds and launch new companies.

According to InvestHK, the government agency charged with attracting business investment to the city, Hong Kong is now home to more than 3,750 start-ups, up 12 percent on 2020 and nearly 70 percent over 2017.

Hong Kong's financial strengths have supported the emergence of a host of fintech and cryptocurrency firms, including unicorns Airwallex, TNG, Amber Group and WeLab, the latter holder of one Hong Kong's eight virtual banking licenses.

The city's history as one of the world's great trade hubs has supported the emergence of a host of digital logistics

and delivery businesses, including three unicorns – on-demand delivery firms Lalamove and GoGoX, and travel and tourism platform Klook.

But its new economy range extends much further. Other of its dozen unicorns include vertically integrated fashion company Trendy Group International, e-commerce platform Cider, diagnostic testing firm Prenetics, which became the first Hong Kong-based unicorn to list on the Nasdaq in May 2022, and Animoca Brands, a world leader in digital entertainment and gaming (see featured interview on page 32).



## Key economic indicators



**7.5 million**  
Population



**293.3**  
Mobile subscriptions per 100 people



**US\$46,324**  
GDP per capita



**6.6 million**  
Internet users



**22 million**  
Mobile subscribers



**87.9**  
Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	3.8	2.8	-1.7	-6.1	6.4	2.0

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank/Asian Development Bank/Hong Kong (SAR) Government (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer (population).



## Leading 10 Emerging Giants

		Sector	Business
1	<b>Catheon Gaming</b>	Cryptocurrency/Blockchain, Gaming	Play-to-earn gaming platform for fantasy NFT PvP and P2E gaming ecosystems on the Solana blockchain.
2	<b>Hex Trust</b>	Cryptocurrency/Blockchain, FinTech	Bank-grade custody solutions intended for digital assets.
3	<b>6waves</b>	Gaming, Mobile, TMT	Gaming applications for building social networks among gamers.
4	<b>HALARA</b>	E-Commerce	Women's fast fashion brand.
5	<b>Trend Lab</b>	Artificial Intelligence & Machine Learning, Big Data, FinTech, TMT	Financial technology company facilitating big data analysis.
6	<b>BDW Exchange</b>	FinTech, Mobile	Cryptocurrency exchange platform.
7	<b>First Digital Trust</b>	Cryptocurrency/Blockchain, FinTech, TMT	Digital asset custody services.
8	<b>Snapask</b>	Artificial Intelligence & Machine Learning, EdTech, TMT	Education technology company that makes education more effective, personalized and accessible.
9	<b>Wombat Exchange</b>	Cryptocurrency/Blockchain, FinTech	Blockchain technology for crypto trading.
10	<b>HKbitEX</b>	Cryptocurrency/Blockchain, FinTech	Digital asset exchange platform.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**Hong Kong's many start-up advantages include pro-business policies, a simple and low tax system, excellent universities and the prospects offered by the Greater Bay Area.**

**Irene Chu**  
Head of New Economy and Life Sciences, Hong Kong, KPMG China.





Hong Kong is also emerging as a regional hub for sustainable banking and green finance. Since 2017, the Hong Kong Stock Exchange has required listed companies to disclose environmental, social and governance (ESG) information, creating opportunities for new firms such as Miotech, which supplies ESG performance data to investors.

### Ease of business

Offsetting Hong Kong's high costs, particularly for real estate, are multiple benefits. The city's pro-business outlook remains as strong as ever. Taxes are low, the rules that exist are easy to navigate and sources of funding are plentiful.

Start-ups are specifically targeted through 124 incubators, accelerators and co-working spaces and a multitude of government policies aimed at encouraging innovation and technology uptake.

Most recently, the introduction of a new listing regime for special purpose acquisition companies (SPACs) in December 2021 has further enhanced its position as a listing location for high-growth companies from Mainland China and other parts of Asia Pacific.



**Hong Kong, being a gateway to Mainland China, is a critical hub for innovation, and will continue to incubate ideas incorporating the best of China and Global to support clients around the world**

**Yvonne Yiu**  
Co-Head, Global Liquidity and Cash Management, Asia Pacific, HSBC

Hong Kong also continues to offer advantages as a gateway for companies looking to tap into Mainland China's potential as a market and a development location.

Fintech player WeLab, for example, now has several hundred staff based just across the border in Shenzhen handling its 50 million users in Mainland China.<sup>18</sup>

Its universities – five of which feature in QS World University Rankings 2021 global top 100 – are another core strength, especially for companies looking to build businesses in the areas of life sciences and biotech.

"As well as giving students skills in areas such as sustainability, fintech, blockchain and so on, very much like Stanford and MIT, they're also very supportive of students trying out new ideas that can lead to the creation of new companies, not just paper ones," says Irene Chu, Head of New Economy and Life Sciences, Hong Kong, KPMG China.

### Global appeal

The city continues to attract founders from around the world, with non-locals responsible for setting up nearly three out of 10 of all start-ups – 20 percent of these founders are Mainland China, 14 percent from the US and 11 percent from the UK.<sup>19</sup>

"Hong Kong is still the place where east meets west to serve global markets," says Peter Yan, CEO of Cyberport, the city's biggest start-up hub, home to 1,700 companies, 90 percent of which are technology start-ups.

With the further development of the Guangdong-Hong Kong-Macau Greater Bay Area – a major initiative to integrate Hong Kong (SAR), Macau (SAR) and nine nearby Mainland cities into a single economic unit – the city stands poised to continue benefiting from China's emergence as an economic superpower.

"The rise of new economy businesses in the last few years has led to a renaissance of entrepreneurship," says Yan. "Hong Kong is playing a huge role in the internationalization of innovation."



**Hong Kong's international cultural links are enhancing another big area of development – art-tech. We're seeing this come together in NFTs and the metaverse on the one hand and the development of the West Kowloon Cultural District and Hong Kong's growing status as an art market hub on the other.**

**Peter Yan**  
CEO, Cyberport

<sup>18</sup> See "Hong Kong fintech unicorn WeLab raises \$75M led by insurance giant Allianz," 8 March 2021, <https://techcrunch.com/2021/03/07/welab-75-million-fundraise-allianz/> (accessed 12 May 2022).

<sup>19</sup> See InvestHK's "Hong Kong's Start-up Ecosystem," <https://www.startmeup.hk/about-us/hong-kongs-start-up-ecosystem/> (accessed 12 May 2022).



## Featured interview Animoca Brands

**Location:**

Hong Kong

**Co-Founder and Executive Chairman:**

Yat Siu

**Tech sector:**

Metaverse

**Launch:**

2014 (as mobile game publisher)

**Employees:**

700+

**Offices:**

14

**VC:**

\$604.5 million including \$359 million in early 2022 at a \$5.8 billion post-money valuation

**Key investors:**

Liberty City Ventures, Sequoia China, Gemini Frontier Fund (Winklevoss), SoftBank, Samsung Venture Investment Corp., Gobi Partners

Animoca Brands is one of the world's leading technology groups in digital entertainment, blockchain and gaming. Led by serial tech entrepreneur Yat Siu, the company and its various subsidiaries are disrupting the \$176 billion game business for 3.24 billion gamers globally. It's on a mission to bring digital property rights for gamers and users, create a new asset class, enable play-to-earn economies, and build the open metaverse. A leader in the emerging market of digital decentralized assets, Animoca Brands has emerged as the most prolific investor in NFT-centric Web 3.0 companies. The metaverse market globally is forecast to reach \$829 billion by 2028 from \$47.7 billion in 2020.

**How do you define the metaverse?**

We define the metaverse as ownership of our digital life and digital experiences, and our data as a property right. It's not to be confused with VR or AR, which we see as interfaces. The metaverse is a way to take back control of the Internet, of our digital identities.

**What are Animoca's key businesses?**

Our investment arm invests quite prolifically in Web 3.0, the open metaverse space. We only invest and support companies that are building open metaverses, on top of blockchain mostly. We have 150 portfolio companies in such areas as gaming, crypto mining, DeFi wallets that store cryptocurrency assets, and marketplaces for digital collectibles.

We also build metaverses of our own. We have 12, most famously The Sandbox, a decentralized virtual gaming world that has over 1 million monthly users.

**How will the metaverse disrupt big tech?**

We currently live in an age of digital feudalism. We describe big tech companies as digital kingdoms, while we are digital serfs. These companies are farming our time and attention, our blocks of data. That data should be a property right. But they own the rights and the derivatives. This has to change. Blockchain can decentralize this ownership, and with the open metaverse and NFTs, we can retain ownership of data rights. We are already seeing the value in disrupting the middlemen so creators can make more money.

**How will this change impact big tech companies?**

The biggest, most powerful companies are data rich companies. But we have a rising inequity between participants in this data-rich world and those left out because they are users, not owners. As this shift occurs, big tech companies will have to rethink their relationships with users, just like when societies shifted from feudal economies to modern capitalism. Companies will either adapt or be left behind.

**What's your investment strategy in this fast-changing market?**

We have a vision to build the open metaverse, but not to own or control it. We are building and investing heavily with minority positions, which works just fine for us because we want to foster growth in the industry. Maximizing profits is not our primary goal.

We are spearheading and innovating decentralized in-game rewards and monetization in video games. We also are expanding in North America, where gaming and digital assets ownership trends are among the most significant globally.

**How is Animoca Brands innovating and fostering market growth?**

We've partnered with 325-plus brands and have issued over 2.1 billion digital collectibles and have leveraged popular motorsport brands to popularize a play-to-earn economy. We were the first in the market with NFT projects for influencers and musicians, and collaborations with gaming/collectible creators. We also invested in three accelerator programs to accelerate more blockchain and NFT start-ups.



## Viewpoint Jayne Chan

Head of StartmeupHK  
InvestHK

Jayne Chan has accelerated Hong Kong's position as a start-up hub since she joined in 2014 as head of Invest Hong Kong's StartmeupHK initiative. In just under eight years, she has seen the rapid development of Hong Kong's entrepreneur ecosystem and venture capital landscape, including the proliferation of R&D labs, tech clusters such as Cyberport and the Hong Kong Science & Technology Park, and an increasingly diverse set of stakeholders emerge from incubators to family offices. InvestHK is charged with helping overseas companies to set up or expand in Hong Kong, and has eight sector teams and 30-plus offices.

### What are the main drivers of Hong Kong's start-up growth at present?

A few factors are driving start-up growth here. A major one is the ongoing digitalization trend where businesses large and small are using technology to reach out to new customers and enhance customer experience, reduce cost and improve operations. The pandemic has accelerated this further, with social distancing rules and work from home policies, and start-ups are responding to these challenges with services and solutions faster than larger businesses.

### Why does the diversity of Hong Kong's start-up scene make it so special?

Very few cities have such an international mix. About 28 percent of founders based in Hong Kong are non-locals from Europe, Asia, the U.S. and Mainland China (which accounts for 20 percent of this non-local group). The U.S. is the second-largest in this grouping, at 14 percent. About 7 percent are Hong Kong returnees.

This diversity coupled with the city's commercially-focused mindset and a large Mandarin-speaking population make for an international mindset that has spurred the growth and intensity of Hong Kong as a financial center.

### What are the primary reasons Hong Kong is able to attract start-ups?

In our recent survey, more than 50 percent cited access to international/regional markets, a simple tax system and low tax rate, and business opportunities in Mainland China. Funding is another reason. Being one of the world's major financial centers, Hong Kong has funding availability that covers the lifecycle of a start-up, from early seed stage, through to venture capital, late stage private equity and listing on the stock exchange.

### How does the Greater Bay Area (GBA) initiative factor in?

With the Greater Bay Area added in, you get 11 times the market effect. Hong Kong's population is 7.5 million while there are 86 million people across the GBA's cities, each with their own strengths.

For instance, Shenzhen has a number of tech giants, and also a large number of hardware and IoT start-ups. The city's Nanshan district is known for hardware manufacturing at scale. Meanwhile, life sciences is a particular strong point for Hong Kong. Additionally, fintech companies can test their cross-borders initiatives in the GBA by leveraging joint sandbox initiatives to do pilot trials.

### What is the role of the Hong Kong Stock Exchange in expanding this start-up ecosystem?

The Hong Kong stock market attracted 98 listings that raised HK\$331.4 billion in 2021, with new economy and biotech companies as sweet spots. Additionally, Hong Kong has recently introduced SPAC listings and streamlined the process for overseas investors.

### Are VCs discovering Hong Kong?

We've seen many new funds and regional offices set up. What also bodes well is that a growing number of family offices are investing in start-ups and emerging companies.

We're seeing growth in the number of angel investors who tend to be serial entrepreneurs and are willing to take a risk. Despite Covid, the investment community was busier than ever in 2021, proving that they were able to rely on virtual tools.

### What are the key tech sectors for Hong Kong start-ups?

Fintech is in the lead followed by e-commerce and supply chain and logistics management. Remote learning has driven exciting developments in EdTech. NFTs and crypto are also generating a lot of interest. A new legislative framework for regulation of virtual assets is set to be rolled out in Hong Kong, an important step as metaverses and NFTs grow.



# India

2022 has already been a milestone year for the Indian start-up economy. From its first ever unicorn in 2011, the ecosystem witnessed its 100th start-up unicorn in 2022. Collectively, these 100 Indian unicorns have raised over \$90 billion, and have a combined valuation of about \$333 billion.<sup>62</sup>

India had a record year for unicorns in 2021, creating 42 — more than in the previous five years combined — and cementing its position as home to the world’s third highest number of unicorns and start-ups, behind the US and China.<sup>63</sup>

With a huge body of start-ups already up and running — more than 73,000, according to start-up data platform Tracxn<sup>64</sup> — and venture-funding flows set to remain strong, major new companies are set to keep emerging at a similar rate.

“India has already added another 11 unicorns in the first quarter of 2022 — the rate of increase isn’t letting up,” says Amarjeet Singh, Partner and National Lead — Emerging Giants and Start-ups at KPMG in India.

As elsewhere across the Asia Pacific region, the COVID-19 pandemic provided a massive boost to digitization in India. The country’s already large smartphone market jumped by 7% in 2021, with 161 million new phones shipped,<sup>65</sup> stimulating a huge uptake in direct-to-consumer (D2C) services, such as those of food delivery giant Zomato; digital payments, such as fintech Paytm; and education, such as that of K-12 school teaching platform, Lead.



## Key economic indicators



**1,380 million**

Population



**83.6**

Mobile subscriptions per 100 people



**US\$1,928**

GDP per capita



**834 million**

Internet users



**1,154 million**

Mobile subscribers



**60.4**

Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	6.8	6.5	4.0	-7.3	8.3	8.7

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>62</sup> Inc42, Unicorns of India: Decoding India’s 100 Unicorns Report 2022, <https://inc42.com/reports/unicorns-of-india-decoding-indias-100-unicorns-report-2022/>

<sup>63</sup> Forbes India, 31 December 2021, <https://www.forbesindia.com/article/startups/meet-all-the-42-unicorns-born-in-2021-the-highest-ever-for-any-year/72637/1>

<sup>64</sup> Source: <https://tracxn.com/explore/Start-ups-in-India>.

<sup>65</sup> According to IDC. See “India’s Smartphone Market Grew by 7% in 2021, Despite Continued Pandemic Related Challenges, says IDC”, <https://www.idc.com/getdoc.jsp?containerId=prAP48877022>.



## Leading 10 Emerging Giants

		Sector	Business
1	<b>BrightChamps</b>	Artificial Intelligence & Machine Learning, EdTech	E-learning platform providing classes on coding and mathematics thinking for children.
2	<b>InterGlobe Technology Quotient</b>	SaaS, TMT	Computerized reservation system for the hotel and travel industry.
3	<b>Juspay</b>	FinTech, Mobile, Mobile Commerce, SaaS, TMT	Mobile payment browser supporting mobile-based payment options.
4	<b>Ki Mobility Solutions</b>	E-Commerce, Industrials, TMT	Online retailer of parts and accessories and provider of maintenance and repair services for automobile entrepreneurs and owners.
5	<b>Teachmint</b>	EdTech, Mobile, SaaS	Live tutoring and teaching platform for conducting live streaming of classrooms and learning management.
6	<b>ixigo (Le Travenues Technology Limited)</b>	E-Commerce, Mobile	AI-based travel application for organizing, booking, and tracking trips.
7	<b>Airtel Payments Bank</b>	FinTech, Mobile, Mobile Commerce, TMT	Mobile banking services aimed at giving all Indians access to an equal, effective, and trustworthy banking experience.
8	<b>Atlan</b>	Artificial Intelligence & Machine Learning, Big Data, Mobile, TMT	Data intelligence platform for confronting critical problems through data intelligence.
9	<b>yellow.ai</b>	Artificial Intelligence & Machine Learning, Mobile, TMT	Conversational AI platform aimed at automating customer and employee experience.
10	<b>Niyo</b>	FinTech, Mobile, TMT	Developer of a payroll management platform designed to manage tax and expenses.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**India continues to lead the charge as one of the principal sources of emerging giants in Asia Pacific. In 2021 alone, over 50 unicorns were minted in India – more than the previous five years combined.”**

**Rajat Verma**  
Head of Commercial Banking, HSBC India





Social commerce is another sector that has been accelerated by the pandemic. Meta-backed Meesho became the sector's first unicorn in April 2021 after raising \$300 million in funding round led by Japan's Softbank Group. It now helps some 13 million individual entrepreneurs and small businesses sell goods through WhatsApp, Facebook, Instagram and other social media.

"Most of India's unicorns have emerged because of inefficiencies in the market. That created opportunities for entrepreneurs to come up with solutions," says KPMG's Singh.

Helping that has been a tidal wave of finance – Indian start-ups received US\$34.5 billion in backing in 2021, nearly three times the US\$12.8 billion they got in 2020<sup>66</sup> – and a growing national reputation for innovation – seen in India's rise up INSEAD's Global Innovation Index from 76 in 2014 to 46 in 2021.

With GDP set once again to resume expanding by more than 8% annually,<sup>67</sup> the country is on track for four out of five households to be middle class by 2030 – up from around half now. Add the fact that India is forecast to account for half of new mobile internet users in Asia outside Greater China between 2021 and 2025,<sup>68</sup> and the prospects for further rapid expansion of India's new economy are strong.

"2021 was a landmark year for India's start-up industry. But its benchmarks are going to be broken in 2022, and beyond then, many times again. If we continue to grow at this pace, we should be looking at doubling the number of unicorns and decacorns in India very soon," says Sidharth Tewari, Director for KPMG Private Enterprise at KPMG in India.



**The government is constantly focusing on developing India's potential to boost entrepreneurship and provide a launchpad for unicorns. The Start-up Mission, policies, government programs and the country's recent budget & announcements are all a testament to the support provided to the start-up ecosystem.**

**Sidharth Tewari**  
Director for KPMG Private Enterprise,  
KPMG in India

### Decades of high-tech experience

Business-to-business (B2B) start-ups are also thriving, underlining the breadth of an ecosystem that's able to draw on the software services experience India has acquired since the early 1990s across finance and insurance, business services and data management.

Bengaluru, the center of India's high-tech industry, is also India's unicorn capital, followed by Delhi and Mumbai. The ecosystem is not confined to just Tier 1 and 2 cities – it is spreading to Tier 3 and 4 urban areas.

An increasingly supportive government is also helping. "This year's budget had a very strong focus on building a start-up ecosystem thanks to its expansion of access to funding and extension of tax incentives from three years to four years," says Tewari

### Ecosystem obstacles

Although India's funding ecosystem is improving, it has yet to establish a full-fledged venture capital and private equity ecosystem of its own, leaving it more dependent on global funding sources than domestic ones.

Easier adoption of regulations and simpler tax regimes would go a long way towards enabling the growth of the start-up ecosystem, notes Singh. "India has many start-ups looking for overseas listings because its stock markets continue to prefer listing profitable companies, not fast-growing ones which need funds to support their expansion," he says.

However, there are signs that the government would like to deepen existing regulatory incentives. Commerce and Industry minister Piyush Goyal has called on start-ups to suggest how regulations can be revamped to make entrepreneurship easier as part of a push to create another 75 unicorns before India's 75th anniversary of independence in 2023.<sup>69</sup>



<sup>66</sup> See <https://pib.gov.in/PressReleasePage.aspx?PRID=1791456>.



## Viewpoint Debjani Ghosh

President, National Association of Software and Service Companies (NASSCOM)

### Start-ups are redefining India

Start-ups are redefining India — changing the aspirations of young people, creating jobs, solving key challenges for the country and building new opportunities in global markets. Technology start-ups have created innovative business models and solutions across sectors. India today has over 60,000 start-ups, including 25,000 tech start-ups and 100 unicorns that characterize a resurgent India.

The rapid growth of India's start-up sector has been enabled with a strong collaboration with the government. Central and state government departments have launched multiple programs to support start-ups from special incentives, innovation funds, incubator and accelerator programs, supportive policies, awards and recognitions, and market access initiatives. In addition, the public digital platforms built by the government like Aadhar and Unified Payments Interface (UPI) have emerged as a hotbed of innovation for start-ups. NASSCOM has partnered closely with the government to drive the growth of the sector and build a high growth and impactful start-up sector in the country.

Earlier this year, Prime Minister Narendra Modi announced that 16 January will be celebrated as National Start-up Day. India's growth in this "techade" — the current decade where technology will be integral to everything — is closely intertwined with its start-up ambitions and dreams.





## Featured interview Shiprocket

**Location:**  
Delhi

**Launched:**  
2012

**Co-founders:**  
Saahil Goel, Akshay Ghulati,  
Vishesh Khurana, Gautam  
Kapoor

**Market sector:**  
Logistics with AI and machine  
learning

**Revenues:**  
\$100 million

**VC:**  
\$225 million

**Investors:**  
Temasek, Zomato, PayPal  
Ventures, Tribe Capital,  
Bertelsmann India Investments,  
Lightrock Capital and others

Shiprocket started out as Kartrocket, a Shopify of India for online stores, but pivoted five years ago to shipping and logistics enablement, based on merchants' need for e-commerce deliveries with negotiated freight rates. The company relies on a machine learning data engine that recommends and selects courier services for a merchant. Shiprocket helps businesses nationwide to better manage their shipping and returns.

### How do you define the core business of Shiprocket?

We're about simplifying e-commerce shipping. We're a volume-driven business, providing faster delivery at lower freight, inventory and fulfillment costs with greater flexibility across seasons and now warehouse set investment. We can offer shipping discounts of 10% to 30% by having one contract spread across merchants. It's an Amazon-esque experience in business-to-business, with pro-active tracking and deliveries in one to two days.

### Describe your business model.

It's a transaction-led model. We charge merchants for various shipping features such as printed shipping labels and order tracking. We're outsourcing the transportation such as air for speed and bikes for last-mile deliveries.

We work with domestic, hyper-local and international delivery services including Federal Express, DHL, Aramex and others to reach 220-plus countries and territories.

We bridge the gap between carriers, shippers and consumers with tracking, best routing, and communication using SMS and email notifications of deliveries. The functions are all on a mobile app as well as desktop app.

### How does machine learning kick in?

CORE is our courier recommendation engine. It analyzes millions of shipments sent using Shiprocket and ranks courier partners on delivery time, pick-up performance, undelivered or returned orders, and payout time for cash on delivery. This helps merchants to select the courier company with the best rating and lowest cost.

We also predict a near accurate estimated date of delivery which lets merchants make informed decisions on which carriers to use vis-a-vis the cost.

### What is the main growth driver?

It's all about scale and driving more volumes. We enjoy the volume: 200,000 daily shipments and 100,000 sellers. We have a market share of 5% and a customer loyalty rate of 95%. Still, there is a long way to go in this fragmented market. There are no international players in this market segment in India.

### Any expansion plans outside India?

We are experimenting in the Middle East and soft-launched in Saudi Arabia about three months ago. We want to learn from experience. The market is similar to India with shopping online, cash delivery and fragmentation of suppliers.

### How did Covid impact your business?

We've been doubling revenues every year. During Covid and lockdowns, demand increased by three to four times.

We hired 300 to 400 more employees, and now have nearly 1,000 full-time staff.

### What is your biggest managerial challenge?

It's about creating awareness in a big country with a large population. We try to reach a broad audience by influencer advertising and YouTube videos.

### What investment plans are in the works?

Our VCs have been helpful in advising us how to scale faster. We're expanding the warehouse network from 20 currently to 100 in 12 months. Capital is no problem for us.

We've been profitable for a while. We've also made several recent acquisitions in logistics, front-end experience and analytics companies to enhance our offerings.

### What's the biggest lesson you've learned as a founder of three successful venture-backed products?

It's all about execution in scaling up. Think about the unique product you are offering. And, don't sell too early.



## Featured interview udaan

**Location:**  
Bengaluru, India

**Founders:**  
Sujeet Kumar, Vaibhav Gupta,  
Amod Malviya

**Launched:**  
2016

**Sector:**  
B2B e-commerce

**Markets:**  
India nationwide

**Employees:**  
4,500

**Total funding:**  
Approximately \$1.5 billion -  
equity, debt and convertible notes

**Key investors:**  
Lightspeed Venture Partners,  
GGV Capital, DST Global, Tencent,  
Hillhouse Capital

**Annual Revenues CY 2021:**  
approximately USD \$1.4 Billion

**Annual GMV CY 2021:**  
USD \$2.4 billion

Launched by three veterans of Walmart-acquired Flipkart, a highly successful Indian online store start-up, udaan is a one-stop shop for B2B e-commerce to solve trade problems that are unique to India. udaan brings e-commerce and technology to the country's small and medium-sized businesses, focusing on its 15-20 million "kiranas", or mom and pop shops.

Using udaan, retail buyers select a product, and place an order with wholesalers, brands and small manufacturers, who then pack the product and dispatch it through the company's B2B trade platform, udaanExpress. Buyers pay on delivery. The company's portfolio of products also includes udaanCapital, a trade financing platform for buyers and sellers.

### What is the market opportunity for udaan?

India's retail trade market is US\$1 trillion and estimated to be \$1.3 trillion by 2025. Ecommerce is just 4 percent of consumption, and B2B e-commerce has less than 1 percent penetration.

udaan's market share in B2B e-commerce or what we call retail e-commerce is 80 percent. We handle more than 5 million transactions per month on the udaan platform. There is still lots of room to grow.

### What pain point is udaan attempting to solve?

There are inefficient layers in the retail and fulfilment business that add costs to the supply chain. Our technology-driven process provides access to new markets and regions with greater cost-efficiency and better price control.

### How is distribution handled?

We're using a hub and spoke distribution model, with 200 hubs within cities. Our Supply chain network covers 1000+ cities and 12,500+ pin codes with everyday delivery cycle. We have an asset-light model. Our warehouses and our trucks are leased.

### What innovations are you exploring now?

We're looking at group buying within small geographic areas. This helps with limited storage space and keeping inventory of fast-moving items. We also may spin the logistics part of our business into a separate company.

### What's the top seller on udaan?

It's groceries. The platform handles transactions of around 8,000 tons of products daily, making udaan the largest grocery player in the country.

But all kinds of merchandise is sold on the udaan platform from electronics goods to clothing.

### What is the biggest lesson you learned from your experience in building Flipkart?

It's about building capital for a long-lasting profitable company. It's important to be able to offer a full range of services from lending to logistics to tech as a solution.

### What's driving the tech economy?

Five to six years ago, we only had one unicorn. Now we have at least 45 unicorns, udaan included. We have tech-led local companies in education, agriculture, fintech, SaaS, space and AutoTech. With market reforms in India by the government, there's a real opportunity for start-ups.

### When will your company go public?

That is our dream for the near future, in the next one-and-a-half to two years.

### Your company name is symbolic.

Yes, udaan is a Hindi word for taking flight.



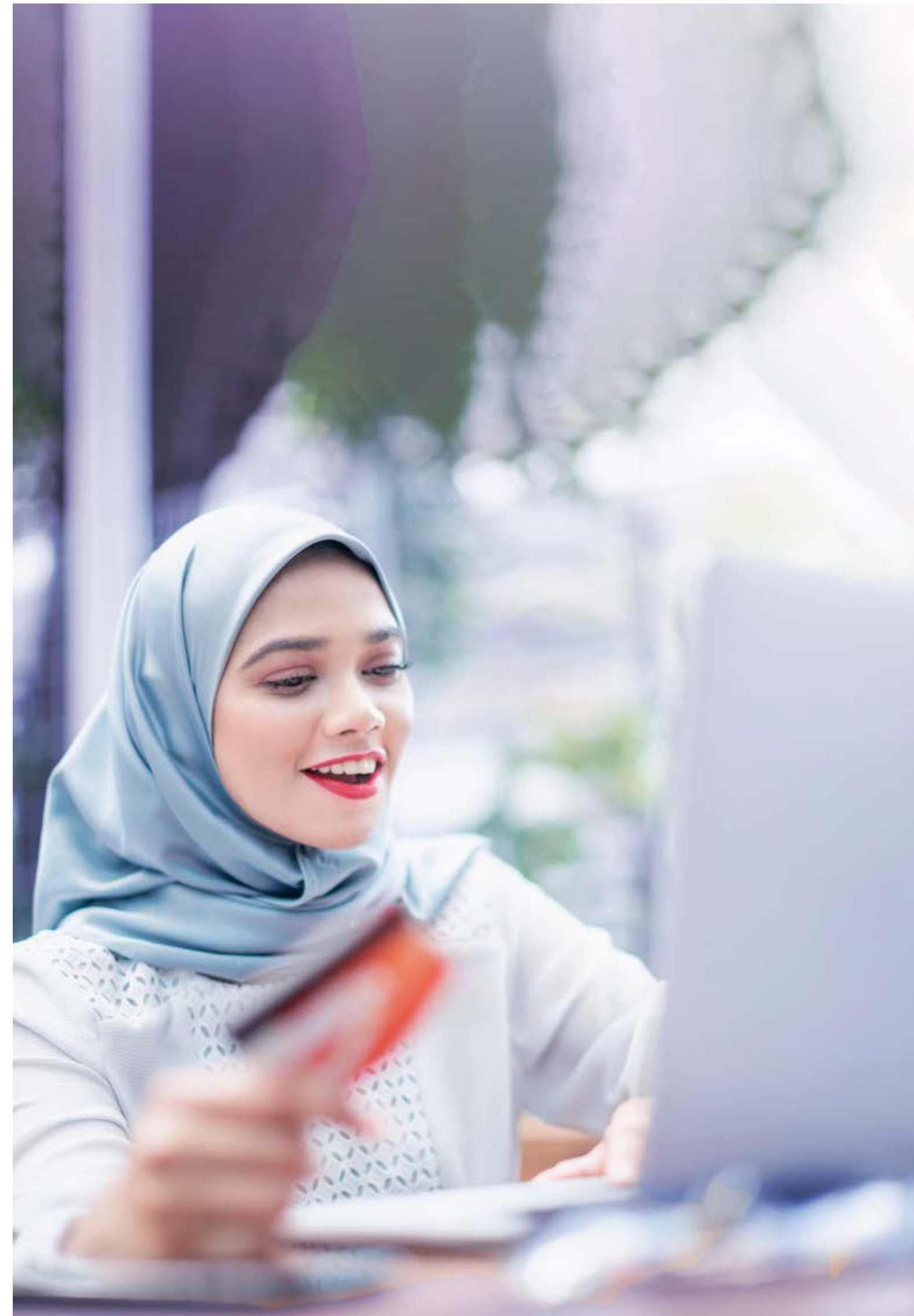
# Indonesia

The last few years have seen Indonesia's new economy take off. A decade ago, less than 25 million people in the country accessed the internet. Now that figure stands at 212 million people – or more than 70 percent of the population, according to World Bank figures.<sup>43</sup>

That's a surge that's seen e-commerce platform Bukalapak raise US\$1.5 billion when it became the first unicorn to list on the Indonesian Stock Exchange in August 2021, and the country's total start-up community grow to just over 5,400 businesses.<sup>44</sup>

"You saw what happened in China through the 2000s. That's where Indonesia is now – in the early days of its digital take-off," says Susanto, Head of Clients and Markets and Insurance Practice Leader, KPMG Indonesia.

It's also a take-off that is set to keep on accelerating. Total e-commerce revenues were US\$27.5 billion in 2021,<sup>45</sup> estimated to grow 20-25% annually for the next several years,<sup>46</sup> driven by the rapid expansion of the country's middle class and continued growth of the country's internet and smartphone user bases.



## Key economic indicators



**274 million**  
Population



**129.9**  
Mobile subscriptions per 100 people



**US\$3,870**  
GDP per capita



**212 million**  
Internet users



**356 million**  
Mobile subscribers



**77.4**  
Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	5.1	5.2	5.0	-2.1	3.7	5.1

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>43</sup> See <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=ID>.

<sup>44</sup> See <https://tracxn.com/explore/Start-ups-in-Indonesia>.

<sup>45</sup> See <https://jakartaglobe.id/business/e-commerce-transaction-value-to-hit-275b-in-2021>.

<sup>46</sup> See, for example, <https://www.globaldata.com/indonesian-e-commerce-market-grow-23-8-2022-forecasts-globaldata/>.



## Leading 10 Emerging Giants

	Sector	Business
1	Waresix	Industrials, Supply Chain Tech Online logistics platform offering on-demand warehouse services.
2	Stockbit	FinTech, TMT Investment platform intended to share stock-related ideas, news and other financial information in real-time.
3	PAYFAZZ	FinTech, Mobile, TMT Financial platform offering payment alternative to Indonesians.
4	BukuWarung	FinTech, Mobile Bookkeeping, digital payments, and e-commerce solutions for recording commercial financial transactions.
5	HappyFresh	E-Commerce, FoodTech, Mobile Online grocery platform.
6	Ralali	E-Commerce, FoodTech, TMT Online business solutions platform.
7	Upbanx	FinTech Financial technology platform.
8	Sirclo	E-Commerce, SaaS, TMT Website building platform for e-commerce services.
9	OY!	B2B Payments, FinTech, Mobile Payment software designed to simplify financial transactions.
10	AwanTunai	FinTech, Mobile, Mobile Commerce Developer of a financial application designed to digitize the Indonesian cash economy.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**In markets such as Indonesia that have highly dispersed and often remote populations, digital finance is proving particularly transformational.**

**Herani Hermawan**  
Head of Global Liquidity and Cash Management,  
HSBC Indonesia





### Indonesia's "GoTo" company

Indonesia's country's biggest and best-known technology start-up is Jakarta-based decacorn GoTo, a super-app offering e-payment and multiple other services to more than 170 million users across five countries in Southeast Asia. Formed in May 2021 through the merger of the country's then two biggest start-ups, ride-hailing platform Gojek and e-commerce firm Tokopedia, the company listed on the Indonesia Stock Exchange's Main Board in March 2022, raising US\$1.1 billion.

Fintech platforms are also seeing rapid growth. Payment-infrastructure provider Xendit and robo-advisor Ajaib both realized unicorn status in 2021, followed by digital finance platform Akulaku in early 2022.

Indonesia's open regulatory framework has attracted investment and companies from overseas. In 2021, venture capital deals totaled 10.6 billion, more than double the 4.1 billion raised in 2020,<sup>47</sup> in part due to US\$2.5 billion raised by courier platform J&T Express.<sup>48</sup>

Among the foreign e-commerce players now with a major presence are Singapore-headquartered Lazada and Shopee, and China's JD.com, which saw its Indonesian unit, JD.ID acquire a unicorn valuation in early 2020.

Also from Asia is Hong Kong-based fintech platform WeLab, which in December 2021 acquired Bank Jasa Jakarta, a commercial bank based in the Indonesian capital which it intends to relaunch as digital bank in the second half of 2022.

### Growing government support

Official backing for the new economy, led by the Ministry of Communication and Informatics, is strong, with flagship programs such as 1000 Digital Start-ups National Initiative, accelerator program Start-up Studio Indonesia and Global Entrepreneurship Program Indonesia.

To attract further overseas backing, the government held a four-month-long Joint Exhibition & Junction of Start-up Landscape in Indonesia from October 2021 to January 2022 to introduce early-stage start-ups to venture capital firms from the US, Europe and other parts of Asia.

"The government is very supportive," says Irwan Djaja, Head of Advisory Services, KPMG in Indonesia. "It sees that many longstanding everyday problems, such as financial inclusion and ensuring economic development across all of Indonesia, can be eased or solved with new technologies."

Social commerce platforms such as Super and Evermos have thrived by selling goods to communities, with sales delivered by one or another of them several hundred new logistics firms founded in the last few years, among the most prominent of them Shipper, Astro and SiCepat, as well as GoTo.

B2B needs, such as those of the country's more than 60 million traditional small and medium-size enterprises, are being addressed by a host of fintech and business services platforms, such as SME lending platforms Investree and Modalku, company and business directory website Indotrading and inventory and accounting app BukuWarung.



**The main focus of Indonesia's start-ups is solving everyday problems – that's why we've seen so much growth in payments, ride-hailing, e-commerce and deliveries.**

**Irwan Djaja**  
Head of Advisory,  
KPMG in Indonesia

<sup>47</sup> Pitchbook/KPMG Analysis (Please see figure 5 on page 9 of this report).

<sup>48</sup> Reuters, 24 November 2021, <https://www.nasdaq.com/articles/indonesian-startup-jt-raises-%242.5-billion-ahead-of-hong-kong-ipo-sources>



## Featured interview Xendit

### Location:

Jakarta

### Founder:

Moses Lo

### Launch:

2015

### Market category:

fintech

### Employees:

900

### VC:

\$538 million

### Investors:

Intudo Ventures, Tiger Global, Accel, Kleiner Perkins, Coatue, Insight Partners

Fintech start-up Xendit, headquartered in Jakarta, simplifies the payment process for businesses in Indonesia and Philippines. Founded by Singaporean-born and Berkeley MBA graduate Moses Lo in 2015, Xendit reached unicorn status in September 2021 with a \$150 million investment led by Tiger Global. The young start-up still has a long runway.

### What is the core positioning of Xendit?

We are a business-to-business payment gateway, much like Stripe in the U.S. but for Southeast Asia. We're mainly a mobile-first service for merchants to accept and send payments, and hold money. Our payment suite also consists of lending and fraud detection services.

### What are some characteristics of your key market?

Indonesia is a really large economy, 50 percent of population is under the age of 30, there's 100% mobile phone penetration and financial literacy is low. For the market to develop as a digital and service economy, infrastructure is needed – financial, data, logistics. It's not very cool or sexy to do this background infrastructure work. But someone has to do it, and we like doing it. We were inspired to be in this fintech space before fintech was considered "cool".

### What is the market potential for Xendit?

We do about \$15 billion in payments per year, and we're growing by 10 percent per month. It's sustained growth. Currently, less than 1 percent of payments are digital in Indonesia. So there is lots of room to grow. The biggest challenge for us is the still-widespread use of cash in Indonesia. This is an untapped market with lots of room to grow.

### Why is there low acceptance of digital money in Indonesia?

Our country is made up of islands, not a single land mass. It is much harder to reach 15,000 islands. The telecommunications infrastructure is still not there. Also, there is a legacy of mistrust of digital payments resulting from the 1997 Asia financial crisis. But we're beginning to see greater acceptance.

### What's your expansion strategy?

We launched our service in Indonesia in 2015. For the first two years, we weren't ready to take on another country. We opened in Philippines in 2020 because customers who used us in Indonesia were asking us to go there. It took us three years to explore exactly what we needed to do to open the market, and a year to find the right Philippines-based person to lead that effort. We will soon be the biggest B2B player in the Philippines. We have ambitions to eventually expand across Southeast Asia.

### What's one of your company's key innovations?

We were the first to bring to market a six-digit pin code for e-commerce transactions and payments made through credit and debit cards. This allows for extra verification and protection against fraud.

### How did your start-up attract international VC money and become a unicorn?

We were the first Indonesia start-up to join the US-based YCombinator accelerator in 2015. On YC Demo Day, Accel found me. A couple of weeks later, Accel offered a term sheet in 12 minutes. They understood payments, what was needed to scale, and they saw me as from the region. Kleiner came in 2017 through connections from earlier investor Intudo Ventures. The partner flew to Jakarta to meet me. In March 2021, Accel returned to lead a \$64 million Series B round. Six months later, Tiger Global led a \$150 million Series C deal at a \$1 billion valuation. Tiger Global was doing a payments company in every region in the world, and had done their research. They came up with a fair and right value. It wasn't too far away from the market rate for our company given our traction and comparables.

They moved lightning fast (24 to 48 hours) in a founder-friendly way.

### How is Xendit's management structured?

We are Southeast Asia-focused across 15 countries, so we have to be very local. Our leadership team is in six different markets. It's a distributed team versus a hub and spoke model. Our founding team is from four countries.

### What are the talent challenges that Xendit faces?

It's hard to find talent at the mid-to-senior level, but we are seeing more executives coming out of decacorns and unicorns. Employees are young. We train fresh grads in-house, and we're able to retain them. We offer stock options. We have a diverse mix of talent from overseas and locally.



# Japan

With its strong technology base, long history of innovation and entrepreneurship, and wealthy domestic market, Japan has long had all the necessary ingredients for a powerful start-up ecosystem.

Until recently, however, it lagged much of the rest of the world in producing powerful new technology companies, with an economy that continued to be dominated by giant corporations established decades ago.

Now, however, things are changing. Although its unicorn population remains relatively small – just six as of April 2022 – its total number of technology start-ups now stands at just over 5,200, up from 3,300 in 2020, according to start-up data platform Tracxn.<sup>22</sup>

Also on the rise is venture capital funding, which in 2021 hit a record high of US\$4.5 billion, and the size investments: among the year’s biggest deals were US\$143 million for cloud-based HR software company SmartHR and US\$230 million for media-tech platform SmartNews.<sup>23</sup>

And for the first time, foreign investors are showing major interest, highlighted by PayPal’s acquisition of buy-now-pay-later platform Paidy in September 2021 for US\$2.7 billion.



## Key economic indicators



**126 million**

Population



**152.4**

Mobile subscriptions per 100 people



**US\$40,193**

GDP per capita



**117 million**

Internet users



**192 million**

Mobile subscribers



**92.9**

Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	1.7	0.6	0.3	-4.6	1.7	2.9

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>22</sup> See <https://tracxn.com/explore/Start-ups-in-Tokyo>.

<sup>23</sup> See Venture Pulse, Q4 2021, 19 January 2022.



## Leading 10 Emerging Giants

	Sector	Business
1	<b>Cygames</b>	Augmented Reality, Gaming, Mobile, TMT Designs and develops smartphone gaming apps, animated games, browser games and console games.
2	<b>Caddi</b>	Industrials, Supply Chain Tech Operator of an order-management platform for manufacturing industry to track industrial products.
3	<b>Atama +</b>	Artificial Intelligence & Machine Learning, EdTech Adaptive learning platform designed to make learning an easy process.
4	<b>Global Mobility Service</b>	FinTech, Internet of Things Lending services for low-income people to finance vehicle purchases.
5	<b>SODA</b>	E-Commerce Footwear marketplace for buying and selling sneakers.
6	<b>Netstars</b>	FinTech, Mobile Commerce Inbound payment services offering QR code payment aggregator services in Japan.
7	<b>Andpad</b>	Construction Technology, Mobile, Real Estate Technology Construction management mobile application offering information on construction work.
8	<b>ExaScaler</b>	CleanTech, LOHAS & Wellness Next-generation computing systems designed to save energy and contribute to society through advances in science and technology.
9	<b>Gojo &amp; Company</b>	FinTech Financial services offering financial access for everyone irrespective of their background.
10	<b>CureApp</b>	Digital Health, Mobile Medical treatment application platform to help reduce lifestyle diseases globally.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



Until recently, Japan's large domestic market was the main focus of most start-ups. But with the population shrinking, more and more of them are now looking overseas if they want to grow fast.

Daiki Sato  
Partner, KPMG Japan





### Early listers

One longstanding reason for Japan producing few new giant firms is the structure of its financial markets, and in particular the relative ease with which small companies can list on stock markets compared with most other countries. “In the US, companies tend to wait until they’re big before going public. In Japan, they list much earlier, so you don’t see the same pre-IPO valuations,” says Daiki Sato, Associate Partner, KPMG Japan.

While being able to get funds from the market early is an advantage for many companies, the downside is that few face the same pressures to grow that US start-ups are subjected to.

The size of Japanese companies has also been restricted by the tendency of most start-ups only to target the domestic market. This is partly due to the country’s size – Japan is still comfortably the world’s third largest economy – and partly for cultural reasons. “The main focus of most start-ups is still Japan – that’s big enough for most companies,” says Sato.

However, with the Japanese population ageing and shrinking, an increasing number of start-ups are looking overseas.

Among the sectors with global appeal are drug discovery, whose intellectual property can be sold worldwide; the fast-growing space sector, spurred by the success of Elon Musk’s SpaceX and Jeff Bezos’ Blue Origin; and those with products or services targeting the elderly that will soon be finding a ready market in many other developed countries.

### Ramping up the new economy

There is also a growing awareness of a broader need for change if Japan is to rediscover its economic dynamism. Technology firms may dominate market valuations in the US, but Japan’s biggest companies remain automakers Toyota and Honda, industrial conglomerate Mitsubishi, telecoms giant NTT and Japan Post.

“The government wants to change this industry structure. It knows that technology start-ups can do this and help Japan catch up with global trends,” says KPMG’s Sato.

Various steps are being taken in this direction. The government is setting up a JPY 100 billion (US\$780 million) fund to accelerate R&D focused on advanced technologies including big data, artificial intelligence, semiconductors, robotics, quantum technology and biotechnology.

Other recent initiatives include the launching of Start-up City Project Japan, a scheme that highlights the attractions of Tokyo and seven other cities, including Osaka, Nagoya and Fukuoka, as start-up locations, and the Start-up City Acceleration Program, launched by Japan’s leading trade body, JETRO, to bring in accelerators from around the world.

Universities have also started to play a bigger role. In the first half of 2021, the University of Tokyo, Osaka University and Kyoto University all unveiled start-up funds with more than US\$75 million to invest in R&D-based new companies.

In part due to these efforts, Japan’s start-up ecosystem looks set to maintain its rapid pace of development.

With more funds arriving from overseas and an increasing number of companies starting to look at possibilities for growth beyond Japan, more fast-growing companies should emerge at an accelerating rate in the coming years.



**Japanese drug discovery, space, manufacturing and energy-related ventures all have global potential – especially if they can get backing from international venture capital firms.**

**Choichiro Koguchi**  
Assistant Manager,  
KPMG Japan



**Japan’s large domestic economy – characterized by tech savvy consumers and plentiful regulation – offers fertile ground for start-ups to experiment with and market digital innovation. Japan also has a role to play in supporting the region’s digital and technological transformation as a developer, exporter, supplier, investor, data provider.**

**Takasuke Sekine**  
Head of Global Banking, HSBC Japan





## Featured interview SmarHR

**Location:**

Tokyo

**Founded:**

2015

**Representative Director/CEO:**

Masato Serizawa

**Sector:**

Cloud software

**Employees:**

520

**VC:**

\$187 million including \$122 million at \$1.3 billion valuation, 2021

**Investors:**

Light Street Capital, Sequoia Capital Global Equities, 500 Start-ups Japan

Aiming to be a leading company in the HR industry in Japan, SmarHR is a cloud software company focused on automating labor management processes and reducing paperwork. The company has a large cloud database that can replace on-premise software for customers. Its system enhances the productivity of traditional HR functions by streamlining employee onboarding, social insurance procedures, year-end tax adjustments, and regulatory updates. CEO Masato Serizawa joined the Software-as-a-Service (SaaS) start-up shortly after its launch and previously was CTO before being named CEO in 2022. The executive team includes Shoji Miyata, who launched KUFU (currently SmarHR) and two former execs from Japan's e-commerce leader Rakuten.

**How would you describe the company culture?**

We have a service-oriented culture and as part of this, we believe in putting our employees first. We aim for everyone to trust each other and be able to work comfortably. We often cite American entrepreneur and investor Paul Graham when discussing our values: First and foremost, make something that people want.

**How is SmarHR positioned for the Japanese market?**

Most Japanese companies are still overseeing labor management with manual paperwork. There are 1.87 million business entities in Japan. SmarHR is the leading labor management cloud player in the market with a 45.8 percent market share, including a 71.7 percent share of the enterprise segment.

**How has Covid impacted your service?**

The current labor shortage in Japan is a major societal issue, with approximately 6.4 million jobs presently unable to be filled. Further, the pandemic has accelerated demand for flexible working arrangements, including flexible hours, part-time and work-from-home. With these trends in mind, our company's aim is to standardize and streamline HR management processes to unlock employees' full potential.

**How is SmarHR differentiated?**

We are a one-stop shop labor management cloud services player, with the capability to manage all aspects of HR management from onboarding to social insurance and employee contracts to resignations.

We serve all customer sizes and industries, and a diverse range of sectors including IT, retail, hospitality, manufacturing, education, and infrastructure.

**What's your business model?**

We charge a subscription based on the number of employees, and provide a range of service options that match their needs.

**What's your sales goal?**

We want to triple the business each year in the coming two consecutive years.

**Could you share an example of a customer that SmarHR has worked with?**

We worked with Hotel Otani on simplifying their system for tax forms.

This reduced their time needed to complete these forms by 75 percent. With Sagawa Global Logistics, we reduced the employee onboarding procedure from 14 days to 2 days, with no paperwork, no stamps, and no envelopes.

**Your company is also making a contribution to a sustainable society. Please describe.**

We are enabling a remote work force, reducing paperwork, and increasing access to social insurance through the web. We also are reducing security risks from lost paperwork.



# Malaysia

Driven by a strong government focus on technology development, Malaysia is putting in place the resources necessary to be a major player in Asia Pacific's new economy.

Already, the country has produced a handful of major start-ups. January 2022 saw used-car e-commerce platform Carsome become the country's first unicorn after a US\$290 million funding round gave it a valuation of US\$1.7 billion. It was also the original home of regional ride-sharing giant Grab, which was founded as MyTeksi in Kuala Lumpur in 2012 before relocating its headquarters to Singapore in 2014.

It is home to a sizeable body of new technology companies – nearly 4,800, according to start-up data platform Tracxn<sup>49</sup>.

And funding is starting to reach a significant level – total committed venture capital funds hit US\$1.2 billion in 2021, up 20 percent on 2020, and nearly five times more than Malaysian start-ups raised in 2019, according to Securities Commission Malaysia.<sup>50</sup>

With a young population – the median age is 29.2 – that is also increasingly well educated – nearly 600,000 students were in higher education in 2020 – the country also has a strong pipeline of young talent.<sup>51</sup>



## Key economic indicators



**32 million**  
Population



**137.5**  
Mobile subscriptions per 100 people



**US\$10,412**  
GDP per capita



**25 million**  
Internet users



**44 million**  
Mobile subscribers



**78.1**  
Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	5.8	4.8	4.4	-5.6	3.1	5.5

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>49</sup> See <https://tracxn.com/explore/Start-ups-in-Malaysia>.

<sup>50</sup> See <https://www.sc.com.my/resources/publications-and-research/sc-annual-report-2021>.

<sup>51</sup> See [https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=155&bul\\_id=OVByWjg5YkQ3MWFZRTN5bDJiaEVhZz09&menu\\_id=L0pheU43NWJwRWVVSzkiWdzQ4TIhUUT09](https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=155&bul_id=OVByWjg5YkQ3MWFZRTN5bDJiaEVhZz09&menu_id=L0pheU43NWJwRWVVSzkiWdzQ4TIhUUT09).



## Leading 10 Emerging Giants

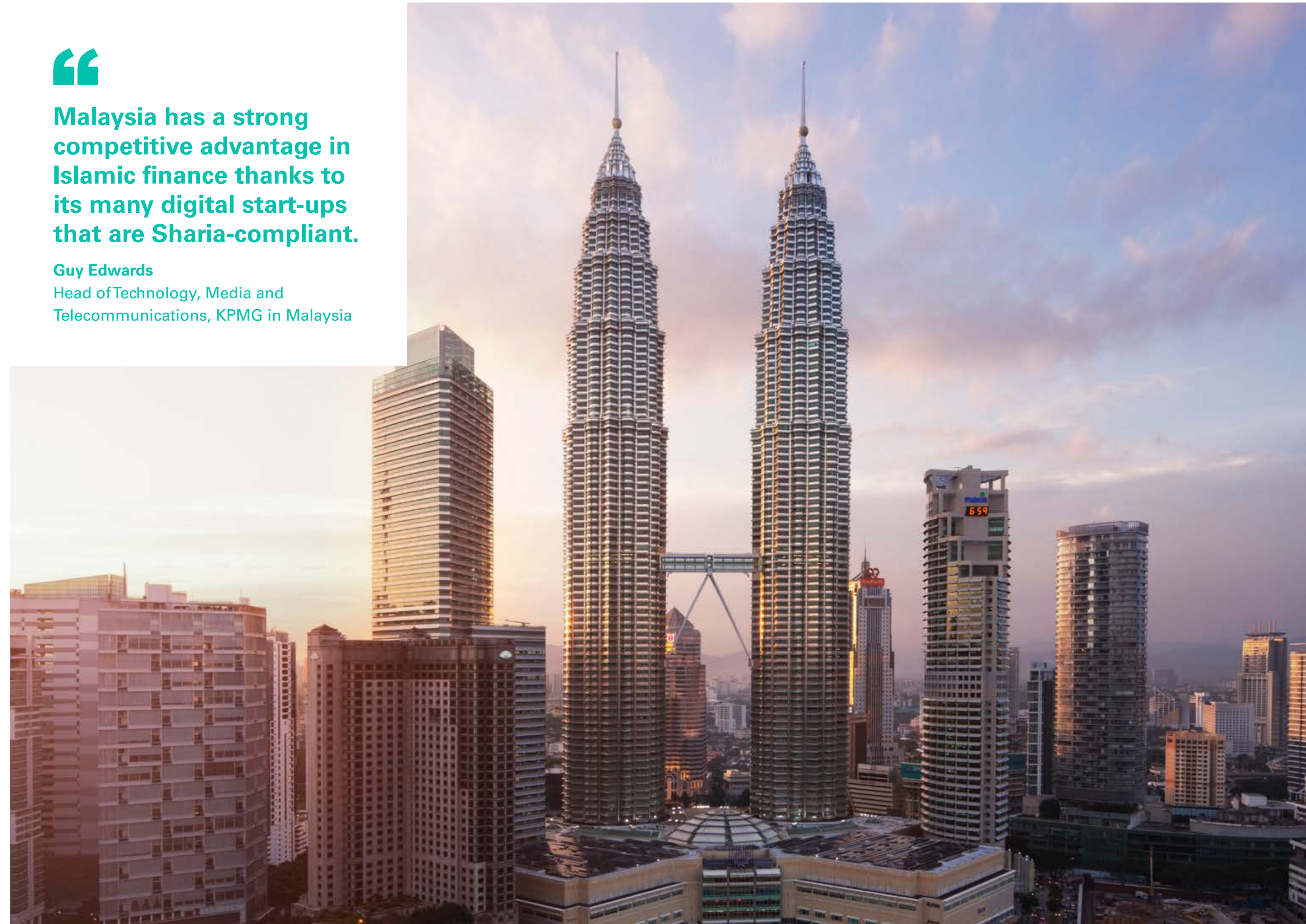
	Sector	Business
1	<b>Boost Holdings</b> Mobile Commerce	E-wallet and e-commerce platform providing bill payment services.
2	<b>Exabytes</b> E-Commerce	E-commerce hosting services to help small and medium-sized enterprises to grow their online business.
3	<b>Jirnexu</b> FinTech	Customer acquisition and lifecycle management system.
4	<b>Presto Mall</b> E-Commerce, TMT	Online marketplace aimed at making online shopping more personalized and engaging.
5	<b>Mindvalley</b> Artificial Intelligence & Machine Learning, EdTech, Mobile, TMT	Education investment group for investing in education businesses.
6	<b>Neurogine</b> FinTech, Mobile	Fintech solutions for banks, financial institutions, money brokers, investment managers, fund operators, governments and the telecom sector.
7	<b>Eatcosys</b> FinTech	Integrated platform offering retail solutions.
8	<b>Says</b> Mobile, TMT	Social news company providing news overviews and easy-to-read segments.
9	<b>Lapasar</b> Advanced Manufacturing, B2B Payments, E-Commerce, Mobile, SaaS	E-procurement platform that helps e-commerce firms manage their business.
10	<b>PolicyStreet</b> FinTech, InsurTech	Provider of online insurance services

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**Malaysia has a strong competitive advantage in Islamic finance thanks to its many digital start-ups that are Sharia-compliant.**

**Guy Edwards**  
Head of Technology, Media and Telecommunications, KPMG in Malaysia





## The plan

The government's broad goal for its technology sector, laid out in the Malaysia Digital Economic Blueprint 2021, is for Malaysia to have a technologically advanced economy by 2030, built around nearly US\$12 billion worth of investment it is committing to fiber optic and 5G networks, cloud and cybersecurity infrastructure, and training.

One part of this is upgrading its manufacturing sector via the government's national policy on Industrial Revolution 4.0 (IR 4.0), which includes the goals of moving the economy towards higher value-added processes via digitization, advanced manufacturing technologies and efficient resource utilization. The plan calls for the establishment of more digital services companies, with the immediate target being to create 5,000 new start-ups and five unicorns by 2025.

One advantage the country has in this regard is its long history of successful technology manufacturing. As far back as 1996, the government set up a special economic zone for high-tech businesses, MSC Malaysia (formerly known as the Multimedia Super Corridor), in Selangor state, covering 270 square miles between Kuala Lumpur and the city's airport, and founded the Malaysia Digital Economy Corporation (MDEC), which played a key role in persuading many MNC technology companies to establish operations in Malaysia.

"The government's focus is a smart one," says Guy Edwards, Head of Technology, Media and Telecommunications, KPMG in Malaysia. "Rather than just looking to attract MNCs and foreign investment as it did in the past, now it wants to both grow its own advanced manufacturing base and add digital start-ups."

To this end, the country has a multi-pronged strategy that combines upgrading the digital skills of its population, encouraging foreign and big local companies to invest in start-ups and putting together a host of programs to support the growth of new technology firms and the start-up ecosystem.

In 2020, MDEC launched a corporate innovation program aimed at encouraging large local and multinational companies to invest in and help grow start-ups that already has nearly 70 corporates participating, among them China's Huawei and US giant Microsoft.

Other of MDEC's initiatives include its Global Acceleration and Innovation Network program, established in 2015, which has supported more than 130 companies to date, its Malaysia Digital Hub initiative, that provides new companies with co-working space, and its Cradle Investment Program that provides direct financial support to Malaysian start-ups.

In 2021, the country also launched its "Digital Investments Future5 Strategy," a five-year plan aimed at with attracting US\$12 billion in investment for the country's digital sector, and the Malaysian Start-up Ecosystem Roadmap (SUPER) 2021-2030, a blueprint for building a start-up ecosystem that can further drive local innovation, launched by the Ministry of Science, Technology and Innovation's MYStart-up portal.

"Already, one outcome has been a big spurt in new companies, with particularly strong concentrations of start-ups in fintech, including Islamic finance, gaming and ESG-related services," says Alvin Gan, Head of Management Consulting & Technology Consulting practices at KPMG in Malaysia.

## Growth challenges

While Malaysia is good at generating start-ups companies, what is harder is for the more successful of these companies to find the right staff for scaling up. "People here understand technology and how innovation works, so there's no shortage of good ideas," Gan says. "But companies sometimes find it hard to get the guidance and business support they need to grow."

Though whether that will prove a major obstacle remains to be seen. While many Malaysian start-ups remain focused on the local market, the ones to watch tend to have a regional outlook from the start, says Gan, pointing to up-and-coming businesses such as Kuala Lumpur-headquartered drone data services business Aerodyne, FashionValet, an e-commerce fashion platform with operations extending to Singapore and Brunei, and CompAsia, a secondhand electronic devices business now operating across nine Southeast Asian countries.

The question therefore is not so much whether Malaysia will produce successful new economy companies, but how many will emerge. Given the strong level of government support and the increasing amount of resources being funneled their way, Malaysia's start-ups are poised to continue to play a major role in the country's development in the coming years.



**The country has all the right ingredients for start-up companies to flourish. Financial institutions must be committed to offering them the right support so these start-ups can scale beyond Malaysia.**

**Karel Doshi**  
Head of Commercial Banking,  
HSBC Malaysia





## Featured interview MyCash

**Location:**

Southeast Asia

**Founder:**

Mehedi Hasan

**Launched:**

2015

**Sector:**

fintech

**Markets:**

Singapore, Malaysia, Bangladesh

**VC:**

\$5.1 million

**Investors:**

500 Global, 500 Southeast Asia, angel investor Ng Sek San

MyCash was started in Cyberjaya, in the heart of Malaysia's tech hub near Kuala Lumpur, by Mehedi Hasan, a fintech entrepreneur with 10 years' experience. Its business has been focused on remittance payments specifically for migrant workers, offering services on a mobile app. During Covid, the start-up faced difficulties in continuing operations on its own due to regulatory issues. The company was recently acquired by IN Financial Technology (INFT) in Singapore, and the business, rebranded as In Remit, is currently is being integrated as the new owner makes plans to expand in the region.

**What is the potential market size for MyCash?**

In 2019, about 200 million migrant workers globally sent home \$715 billion. This product is aimed at those who don't have a bank account, can't use online services and still need to use over-the-counter payment services. Many of these users are construction workers and maids, primarily from Bangladesh, India, Vietnam and the Philippines. Our super app provides financial services to unbanked migrants in their mother tongue. Our stronghold is Bangladeshi migrants, who account for 70 percent of our customers while the rest are Nepali, Indian and Indonesian.

**What's the business model for MyCash?**

In 2021, we had 2.4 million transactions and GMV of \$49.5 million.

We make money on service charges, commissions, and foreign currency exchanges.

**What's the unique selling point of MyCash?**

We're the only platform in the market that is fully digital and doesn't require the customer to have a bank account.

**How did Covid impact your service?**

We had to stop our Malaysia operation in late 2021 due to regulatory issues. We weren't able to go to customers directly in the onboarding process or KYC identity process to check IDs, work permits, valid passports. In Singapore, you can do this electronically. But in Malaysia, you had to go to customer physically, and that became difficult during Covid.

**How were you able to pivot from that setback?**

We were looking to raise \$1.2 million in funds to reach 500,000 customers in three countries and achieve profitability in 2022. But we weren't able to raise any more funding beyond our seed money from 500 Start-ups, some Malaysian angels and family offices in Hong Kong. VCs don't like a charitable, low-income market. Ultimately, we had to find a company to buy us.

**What will new ownership mean for your start-up?**

I'm continuing on to oversee the consumer remittance business, and will look to expand in other Asian markets. I will focus on serving the Bangladeshi market and SMEs, and apply and get a digital banking license in Bangladesh. As a Bangladeshi myself, I want to focus on that market.

**What are the market opportunities?**

Banks are still very, very slow to adopt these types of services, and there's no fintech yet in Bangladesh for its 7 million SMEs. We can get money to the SMEs digitally within 48 hours. We digitalize e-signature, e-KYC, and financial applications on our app. In our pipeline is offering business loans up to \$2,000 for female customers in Bangladesh.

**How is the business integration coming along?**

I'm a shareholder in INFT, and I plan to help them expand in the region, offer business-to-business services, and maybe IPO in two to three years. Under my supervision, INFT has secured a licensed entity in Malaysia and an eWallet license in Indonesia.

**What's the main lesson you've learned?**

I realized that we needed to target the SMEs and for-profit companies, and not the consumer market. **It's about being fast and flexible, and judging how ready the market is.**



# Singapore

Singapore stands at the forefront of Southeast Asia's new economy, home to 12 unicorns and just over 9,300 start-ups, according to start-up data platform Tracxn,<sup>39</sup> by far the highest total of any country in Southeast Asia, supported by an ecosystem with close to 200 accelerators, incubators and angel networks.<sup>40</sup>

Given the relatively small size of the Singaporean economy, most start-ups based in the city target markets in the surrounding Southeast Asian countries. Indeed, some of its leading companies have started elsewhere and moved to the city. For example, Southeast Asia's first decacorn and still its biggest technology start-up, super-app platform Grab, was founded in Malaysia in 2012, but in 2014 moved its headquarters to Singapore to give it a stronger base for regional expansion.

Two other recently-minted unicorns based in the city are delivery and logistics platform Ninja Van, which offers services in six countries across Southeast Asia, and secondhand-car marketplace Carro.

The city is an ideal base for companies with global ambitions. Fintech provider Nium, for example, offers global money movement and business card-issuing services in markets worldwide, including Latin America, South Korea and Europe. Another example is micro-mobility company Beam, a provider of shared e-bike and scooter services in Malaysia and Thailand, which also has operations in Australia, New Zealand and South Korea and is now looking to expand to Indonesia, the Philippines, Vietnam, Japan and Turkey.



## Key economic indicators



**5.9 million**  
Population



**136.8**  
Mobile subscriptions per 100 people



**US\$59,798**  
GDP per capita



**4.8 million**  
Internet users



**8 million**  
Mobile subscribers



**82.4**  
Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	4.5	3.5	1.3	-5.4	7.6	4.3

All data for 2020, except Internet users, which is for 2021

Sources: World Bank (GDP, GDP per capita), ADB (GDP 2022f), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>39</sup> See: <https://tracxn.com/explore/Start-ups-in-Singapore> (accessed 12 May 2022).

<sup>40</sup> See World Bank, "The Evolution and State of Singapore's Start-up Ecosystem," March 2021, available at <https://openknowledge.worldbank.org/handle/10986/35328> (accessed 12 May 2022).



## Leading 10 Emerging Giants

	Sector	Business
1	<b>Spenco</b> B2B Payments, FinTech	Payment software and technology for reducing the admin burden of payments for growing businesses.
2	<b>Stader Labs</b> Cryptocurrency/Blockchain, FinTech, SaaS	Decentralized financial protocol and application designed for efficient stake management on public blockchain networks.
3	<b>Multiplier</b> HRTech, Industrials, SaaS	Hiring platform designed to hire and manage anyone, anywhere in a few clicks.
4	<b>BandLab</b> AudioTech, Mobile, TMT	Social music-making platform designed to make music and share the creative process with musicians and fans.
5	<b>imToken</b> Cryptocurrency/Blockchain, FinTech, Mobile, Mobile Commerce, TMT	Operator of digital asset management platform intended to offer currency transactions using blockchain technology.
6	<b>Multiverse Labs</b> Cryptocurrency/Blockchain, FinTech, Mobile, Mobile Commerce, TMT	Creator of the first multiverse where companies, organizations, and governments can build their own photorealistic metaverse with intuitive A.I. powered building tools and economic systems
7	<b>Aspire</b> FinTech, TMT	Finance operating system for making business banking easy, fast, and transparent.
8	<b>GeniusU</b> EdTech	Ed-tech platform for connecting students to networks, knowledge and opportunities.
9	<b>DeBank</b> Cryptocurrency/Blockchain, FinTech, SaaS	Multi-chain cryptocurrencies portfolio tracker for users to manage their DeFi assets.
10	<b>99.co</b> Real Estate Tech, TMT	Operator of an online property listing platform designed to list homes and properties for sale and rent.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**Digitalization will remain a vibrant source of new concepts and business models, especially post-pandemic. Over the past decade, Singapore's digital economy has almost doubled its share of total jobs. Our connectivity to both developed and emerging economies provides unique opportunities for investment in the digital industry.**

**Jacqueline Poh**  
Managing Director, Singapore Economic Development Board





### Super-supportive ecosystem

Singapore's advantages for start-ups include its legal and financial strengths, easy to navigate tax system, and strong government support for business. Government initiatives include a wide range of supportive schemes, among them tax credits and fund-matching. Special incentives are available for companies with innovations or technologies aligned with Singapore's national priorities, such as cutting carbon emissions, waste, water and plastic use, and developing plant-based products .

Its universities, notably the National University of Singapore and Nanyang Technological University (NTU), have long played a major role in R&D and its commercialization. More recently, they are also playing a growing role in incubation and talent development. Singapore University of Technology and Design, for example, in the past year has launched two new incubation centers on its campus.



**Singapore will continue to increase in importance as a financial hub within Asia Pacific and on a global scale.**

**Regina Lee**  
Head of Commercial Banking, HSBC Singapore



### Fintech mega-hub

As a country with a strong financial sector, fintech unsurprisingly has a strong presence in Singapore. Digital wallets are expected to overtake credit cards for online payments by 2024 according to global payments research firm FIS, with the popularity of services like Grab's GrabPay and DBS's PayLah!.<sup>41</sup>

Blockchain and cryptocurrency start-ups account for the biggest single part of Singapore's fintech community - about one in five of all businesses in the category, followed by payments businesses (17 percent) and investments/wealthTech (13 percent).<sup>42</sup>

But with Singapore making sustainability a key part of its policy agenda, ESG-related start-ups, especially in sustainable finance, are on the rise. The country's central bank, the Monetary Authority of Singapore, has put aside S\$50 million (US\$36 million) for funding green fintech projects, part of bigger plan to spend US\$2 billion on making Singapore a regional green finance hub.



**The rising middle class, financial inclusion initiatives and cross-border collaboration have driven a proliferation of new startups and unicorns across the region. Within this, Singapore is a trusted hub.**

**Ling Su Min**  
Head of Clients, Markets & Innovation,  
KPMG in Singapore

<sup>41</sup> Fintech New Singapore, "Singapore Fintech Report 2022," <https://bit.ly/SingaporeFintechReport2022> (accessed 12 May 2022).

<sup>42</sup> Fintech New Singapore, "Singapore Fintech Report 2022," <https://bit.ly/SingaporeFintechReport2022> (accessed 12 May 2022).



## Featured interview Zenyum

**Company:**  
Zenyum

**Location:**  
Singapore

**Founder & CEO:**  
Julian Artopé

**Launched:**  
2018

**Sector:**  
healthcare devices and services

**Markets:**  
9 in Asia

**VC:**  
\$60 million from Sequoia Capital India, L Catterton, TNB Aura, SEEDS, others

German-born tech entrepreneur Julian Artopé has grown Zenyum to a leader in cosmetic dentistry products and services, a market category the company labels as “smile cosmetics”. He spotted the opportunity to build this business in an undeveloped market through introducing several related product lines including 3D-printed invisible braces, toothpaste, electric toothbrush, floss, mouthwash, and a mobile app. Now in nine Asian markets, Zenyum first launched Singapore, and most recently added Japan. The start-up is in a fast-growing category and is in quick expansion mode.

### What’s your overall goal with Zenyum?

We are aiming to build one of Asia’s largest consumer brands. Southeast Asia is the fastest-growing market for the dental category. While in the past most dental treatment was only done restoratively or to alleviate pain, Asia’s fast-growing consumer class is becoming more aware of their smile and is looking for cosmetic options. To build a large company in Asia, you can’t be in Singapore alone. Our operations span locally, and we are active in nine markets with local entities.

### How did you come up with the brand name Zenyum?

The word “senyum” means “smile” in Bahasa, the language of Malaysia and Indonesia. We added the “Z” to make the brand younger, and stand out.

### How is Zenyum positioned to focus on Southeast Asia?

The cosmetics dentistry market here in the region is \$23 billion.

Dentistry as a category is still nascent in Southeast Asia. Many millennials are going to the dentist for the first time because of our product. In the past six months, we’ve seen a 70% growth rate for Zenyum. With our full product line, we have synergy across the oral care market. Currently, our top revenue generator is ZenyumClear, the invisible teeth straighteners.

### Describe your average customer.

They’re in the 25-35 age group, predominately female and often at the stage of having disposable income for the first time in their lives. Today’s millennials are less materialistic and more focused on their personal brand: They might not care so much about fridges and cars, but more about education, experiences and beauty products which help their personal brand and confidence.

### How does technology come into play?

We’ve developed a mobile app to remind you to wear your aligners. With the app, customers can take pictures of their teeth and submit the image to Zenyum, or track the wear time of their aligners. We have roughly 80% of our customers using this app on a monthly basis.

### What’s the differentiator for Zenyum against competitive brands?

We’re often more affordable than some big U.S. players, and we offer installment payments to customers. Our product is designed for customers in Southeast Asia, and we focus on more predictable outcomes.

### How did you persuade VC firms to invest?

We’re in a competitive market with little technical IP. But we innovated on the business model and customer funnel in a way that gave us our moat: Execution.

We have a tailor-made product with high inherent complexity, and that is hard to copy. We also focused on effective customer acquisition and strong partnerships from the start. All of this results in a business that has higher conversion rates and efficiency metrics than many competitors, which attracted investors.

### How is your direct-to-consumer marketing strategy working?

Customers send in an image of their teeth via our app, to see if they qualify for the treatment. Then there is a consultation with one of over 500 licensed dentists, spread all over Asia. We’ve also launched pop-up shops in Hong Kong and Singapore to introduce our product on the high street, where customers can see and feel Zenyum. This creates “Instagram-able” moments.

### What’s the secret to your success?

I’m not the most creative guy or best developer.

I’m very focused on process engineering and tight operations, back solving an end state and making it happen via good execution.

### Is the company profitable yet?

Not yet. Profitability is a matter of choice. As a good consumer product company, as long as we can see market potential, we will keep growing and launch new products.

### How would you define your company culture?

Our values are defined as: Speed, grit, candor, curiosity, and lightheartedness. We’re ambitious, humble and hard-working but we also want to enjoy life and do what our customers do: Smile More.



## Viewpoint Jacqueline Poh

Managing Director, Singapore  
Economic Development Board

Already the top destination in Southeast Asia for start-up investment, Singapore-based enterprises are attracting more funding than ever. Start-up ventures based in the city-state raised over S\$11.2 billion (US\$8.02 billion) in 2021, more than double the prior year. In addition, many tech unicorns were minted in 2021, including Ninja Van, PatSnap, Advance Intelligence Group and Nium. More recently, PropertyGuru made its debut at the New York Stock Exchange.

A strong advocate for tech and innovation, Jacqueline Poh is the Managing Director of the Singapore Economic Development Board, the government agency responsible for making Singapore a leading global hub for businesses in Asia. The EDB works closely with other Singapore government agencies to build a pro-business environment that enables companies to create globally competitive products and services.

### How is the Singapore government supporting start-up growth?

Start-ups in Singapore tell me that they appreciate easy access to accelerator programs, a wide range of funding sources, a strong talent base, linkages to overseas markets and lead demand from Singapore.

Start-ups can access over 200 global and local accelerators in Singapore such as Iterative, Singtel Innov8's Innovation Cybersecurity Ecosystem at Block71 (ICE71) and Enterprise Singapore (ESG)'s Startup SG Accelerator. In addition, corporate accelerators help start-ups tap into new regional opportunities. For example, SAP.iO Foundry, launched in 2019, is the company's first accelerator program for Southeast Asia start-ups in Singapore. The program provides participating start-ups access to curated mentorship, and exposure to SAP tech and application programmable interfaces. Its first cohort consisted of seven companies focused on B2B tech, including talent acquisition and management strategy start-up, Pulsifi. Today, Pulsifi serves customers across six Southeast Asian countries.

There is also a range of funding options for start-ups. In 2021, start-ups in Singapore raised a total of \$14.7 billion in 2021, almost triple the sum raised in 2020. The investment arms of government agencies such as ESG's SEEDS Capital and EDB's own EDBI co-invest directly into start-ups and crowd in additional private capital with venture capital firms. A vibrant network of about 400 Family Offices in Singapore also provide ample investable funds for start-ups that meet their investment mandates.

In October last year, investment company Temasek also announced that they will be investing S\$1 billion a year into deep technology sectors.

Through programs such as the Global Innovation Alliance (GIA), the Singapore government helps start-ups based here catalyze cross-border collaboration between Singapore and major innovation hubs globally. Singapore tech start-ups and SMEs can leverage GIA Acceleration Programmes, for instance in Jakarta, Shanghai, San Francisco, Berlin, to connect with business and innovation communities all over the world. In 2021, 39 such programs were conducted. As an example, Hiverlab, a Singapore immersive technology company, participated in a virtual acceleration program to access the Vietnam market, was appointed as Microsoft's exclusive authorized device reseller for its mixed reality device, HoloLens 2, and is now partnering with Microsoft to develop the mixed reality ecosystem in Vietnam.

Singapore also helps fast-growth global start-ups who want to base themselves here secure critical talent. Under Tech@SG, a scheme administered by EDB and ESG, eligible companies can receive up to ten employment passes over two years for experienced global talent hired as part of the company's core team. A few examples of companies who have benefited include Zenyum, a local dental health start-up founded by a foreign entrepreneur; and Padlet, an EdTech start-up company that is expanding through Singapore.

Lead demand and reference customers are important for start-ups. Singapore's Infocomm Media Development Authority (IMDA) also runs the Accreditation@SG program.

This credential qualifies start-ups as contenders to win contracts with government agencies and large enterprises.

To make the experience more seamless for start-ups in Singapore, EDB, ESG and IMDA established Digital Industry Singapore (DISG) in 2019 to serve as a single window for the needs of digital enterprises.

### What types of businesses are increasing their investment in Singapore at present?

EDB will continue to focus on high-growth and high value-added sectors.

Digitalization will remain a vibrant source of new concepts and business models, especially post-pandemic. Over the past decade, Singapore's digital economy has almost doubled its share of total jobs. Our connectivity to both developed and emerging economies provides unique opportunities for investment in the digital industry. Many of the world's largest tech companies from East and West have set up here, including Amazon, IBM, Google, Alibaba, Mastercard, Rakuten, GoTo and many others.

Companies are also capitalizing on Singapore's thriving research and innovation ecosystem to establish new R&D centers, innovation platforms, and partnerships with universities and public research institutions. Dell Technologies for example, launched their Global Innovation Hub in Singapore last year. The National University of Singapore (NUS) and Cisco Systems also launched a Corporate Lab to accelerate Singapore's digital transformation.

The NUS-Cisco Corporate Lab has five strategic research areas including AI, Cybersecurity, Healthcare, Urban Infrastructure and Future Workforce and Productivity.

Other sectors that are propelling new investments in Singapore include healthcare (biotech and MedTech), electronics (including semiconductors), agri-tech, advanced manufacturing and sustainable solutions for the green economy.

### What particular challenges do Singapore start-ups face, and how is Singapore helping to address them?

Finding good engineers, product managers, and other technical talent is a major challenge for many start-ups globally. Singapore already has a strong base of engineering and technology talent emerging from our world-class universities and mid-career skills retraining efforts. Since Singapore started reopening its borders on Oct 2021, the flow of tech talent has also resumed.

Besides Tech@SG which I mentioned earlier, ongoing government initiatives help start-ups leverage service providers that can help them build and manage tech teams remotely, while helping them navigate local regulations to facilitate market expansion.

We are also actively working with companies to train talent for the industry as a whole. For instance, DISG, with the support of IMDA, works with tech companies based here, including Google, Microsoft and IBM, on large-scale training programs for the industry. These programs cover skills such as AI, cybersecurity, software engineering, cloud technology and digital marketing.



# South Korea

South Korea is emerging as one of the world's leading start-up hubs. A surge of venture funding in 2021 – up nearly 80 percent on 2020 to US\$6.4 billion<sup>24</sup> – pushed its unicorn population to 12 as of April 2022, up from just three in 2017.<sup>25</sup> Meanwhile, the country's start-up population totals nearly 6,000.<sup>26</sup>

Significant drivers are a population that is keen to test and adopt new digital services, a long tradition of industrial entrepreneurship, and increased government support. But perhaps the most important factor at present is the huge level of investment in research and development aimed at putting Korea of the forefront of technology.

In 2020, total R&D spending hit US\$83 billion, the equivalent of 4.6% of GDP – the fifth biggest national total worldwide.

With more than three-quarters of that money coming from private companies, the outcome is a host of new businesses across a broad range of sectors.<sup>27</sup>



## Key economic indicators



**51 million**  
Population



**139.2**  
Mobile subscriptions per 100 people



**US\$31,632**  
GDP per capita



**49 million**  
Internet users



**71 million**  
Mobile subscribers



**96.1**  
Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	3.2	2.9	2.2	-0.9	4.0	3.0

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), ADB (GDP 2022f), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>24</sup> See <https://en.yna.co.kr/view/AEN20210923006500315> (accessed 12 May 2021).

<sup>25</sup> See CB-Insights, Global Unicorn Club: Private Companies Valued at \$1B+ (as of April 6th, 2022).

<sup>26</sup> See <https://tracxn.com/explore/Start-ups-in-South-Korea> (accessed 12 May 2021).

<sup>27</sup> See <https://k-erc.eu/s-koreas-rd-spending-5th-largest-among-oecd-members-in-2019/> (accessed 12 May 2021).



## Leading 10 Emerging Giants

		Sector	Business
1	Tridge	AgTech, Supply Chain Tech	Online agri-tech trading platform for trading agriculture products using market intelligence.
2	42dot	Autonomous cars, E-Commerce, MobilityTech, Ridesharing, Robotics and Drones, SaaS, Supply Chain Tech	Autonomous transportation-as-a-service platform for integrating a wide range of future mobility options for delivery services such as autonomous vehicles, drones, and robots.
3	Doosan Robotics	Manufacturing, Robotics and Drones	Designer and manufacturer of collaborative robots designed for industrial automation.
4	Flex	HRTech	HR platform intended to improve work efficiency and employee experience through digital transformation.
5	Planetarium	Cryptocurrency/Blockchain, Gaming	Open-source blockchain platform designed to transform the game's life cycle and revenue model.
6	Blank	E-Commerce	Media commerce platform for selling its beauty products.
7	BankSalad	FinTech	Developer of a money management application aiming to revolutionize South Korea's banking industry.
8	Furiosa	Artificial Intelligence & Machine Learning, Big Data	Developer of AI inference co-processors designed to be integrated into computing platforms.
9	Nyou	Gaming, Mobile	Mobile gaming developer.
10	Coinone	Cryptocurrency/Blockchain, FinTech, TMT	Operator of an asset brokerage platform intended to help users to buy, sell or store cryptocurrency.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



Smart cities are a big focus for many start-ups thanks to Korea's leadership in this area.

Kim Yi Dong  
Partner, KPMG in South Korea





### Platform-dominated

Platform businesses dominate Korea's recent crop of unicorns, notably Viva Republica, the Seoul-based fintech behind financial services super-app Toss; social commerce firm Wemakeprice; Korea's biggest online fashion site Musinsa and online grocer Market Kurly.

The country's new economy start-ups span a broad range of businesses. Consumer-facing ventures such as webcomics, gaming and other forms of online entertainment have all boomed as people have spent more time at home during the COVID-19 pandemic. EdTech firm SmartStudy, owner of children's edutainment brand Pinkfong, and e-book and webcomic provider RIDI both became unicorns in mid-2021.

In the B2B area, Korea's conglomerates are tapping innovations being generated by start-ups. Samsung Engineering, for example, has teamed up with a construction safety management start-up GSIL Co. to build a smart safety platform, Hyundai Motor Group, as well as launching its own "transportation-as-a-service" (Taas) arm, is working with start-up 42dot to foster its autonomous driving business, while LG's chemicals arm, LG Chem, is collaborating packaging start-up Innerbottle on the recycling of plastic drinks bottles.<sup>28</sup>

While the domestic market remains the main focus of most start-ups, more companies are starting to look overseas for growth, with entertainment firms among those leading the way.

Webcomic platform Naver is collaborating with US publishers, including DC Comics, and Kakao Entertainment in 2021 bought US mobile comics platform Tapas for US\$510 million.<sup>29</sup>

"The global popularity of Korean popular culture has opened the way for some major webtoon businesses, points out Kim Yi Dong, KPMG in South Korea.

Overseas businesses are also increasingly interested in the potential of Korean start-ups. Among the headline investments of 2021 was Softbank's injection of US\$1.7 billion into travel and leisure platform Yanolja.<sup>30</sup>



**Korea's talent pool and start-up ecosystem create an ideal environment for entrepreneurs. We expect to see new winners of tomorrow emerge in areas such as e-commerce, interactive entertainment, and green technologies. Many of these businesses have ambitions to expand and will be successful internationally.**

**Jonathan Yip**

Head of Global Banking, HSBC Korea



### Thriving ecosystem

Governments at all levels give enormous support to South Korea's start-up ecosystem, including establishing a Ministry of SMEs and Start-ups in 2017, and the Seoul municipal government's target of making Korea's capital one of the world's top-five start-up centers in 2022.

Wider support of technology further boosts the country's start-ups. In 2020, the government said it was investing US\$95 billion over five years through its Digital New Deal and Green New Deal schemes, giving a major boost to new ESG-related businesses.<sup>31</sup> Other recent projects include committing US\$2 billion to AI research infrastructure to include six AI graduate schools and establishing an Innovation School in Gaepo Digital Innovation Park that can train 2,000 software engineers at any one time.<sup>32</sup>

A further defining point of Korea's new economy market is the present willingness of fast-growing new businesses, especially those in entertainment, to look overseas for growth. This factor suggests that the country's technology companies to be a massive force both across and beyond the Asia Pacific region in the coming years.

<sup>28</sup> LG press release, <https://www.lgcorp.com/media/release/23162>

<sup>29</sup> Kakao press release, <https://www.prnewswire.com/news-releases/kakao-entertainment-acquires-tapas-and-radish-media-two-leading-us-based-storytelling-platforms-301288196.html>

<sup>30</sup> Yanolja press release, <https://www.prnewswire.com/news-releases/yanolja-raises-usd-1-7-billion-in-new-funding-from-softbank-vision-fund-2--301334416.html>

<sup>31</sup> Reuters, 14 July 2020, <https://www.reuters.com/article/us-southkorea-president-newdeal-idUSKCN24F0GA>

<sup>32</sup> Invest Seoul, updated 2021: [https://investseoul.org/bbs/content.php?co\\_id=eng\\_industries\\_1](https://investseoul.org/bbs/content.php?co_id=eng_industries_1)



## Featured interview Npixel

**Company:**

Npixel

**Location:**

Seoul

**Founders:**

Bong-Gun Bae, Hyun-Ho Jung

**Launched:**

2017

**Sector:**

Gaming

**Employees:**

500+ in Korea headquarters,  
Japan branch

**Users:**

2.3 million in Korea and Japan

**Revenues:**

\$80 million 2021

**Projected revenues:**

\$100 million 2022

**VC:**

\$147 million from Altos Ventures  
in Silicon Valley, and early  
investors in Roblox and Krafton  
in the video gaming space

Npixel is the third venture of successful gaming co-founders who have chalked up 13 years of experience and teamwork. A hallmark of their work is the 2013 formation of Nexus Games, creators of the popular game Seven Knights, which was distributed by the country's major gaming company Netmarble. In 2015, Netmarble acquired Nexus, and the founders went on to establish Npixel as their next venture. Npixel claims to have achieved the fastest-ever gaming unicorn status in the Korean gaming space. South Korea is the fourth largest video game market worldwide, following China, the U.S., and Japan.

**How you would define your company's vision?**

We are inspired by the power of interactive entertainment to bring imagination and enjoyment to the world.

**What's the latest, greatest milestone at your company?**

We launched Gran Saga, a MMORPG (massively multiplayer online role-playing game) in Korea in January 2021 and in Japan in November 2021. It's an anime multi-platform, role-playing game with strong visuals, story and sound. Gran Saga achieved number-one on both the Apple App Store and Google Play in Korea, and was in the Top 7 on Apple's App Store in Japan. Gran Saga also won for excellence and technology creation at the Korean Game Awards 2021, and best competitive game at Google Play Awards 2021.

**How is your company expanding?**

We're working on our next game title, Chrono Odyssey. It's an epic fantasy game for enthusiasts. We're looking to develop more titles in-house and have more than one title.

**How are your games appealing to the Korean and Japanese market?**

Games in Asia are more about self-actualization. In the West, the entertainment factor is larger. It's a little bit like apples and oranges.

**Are you looking into expanding into blockchain, the metaverse and NFTs?**

We are looking at these concepts. It reminds me of the past, the mobile game revolution and the shift from PCs to mobile.

These are new opportunities in a new paradigm. We think of the metaverse as an immersive experience that can provide users with characters that seem like real life.

**What's your biggest managerial challenge?**

It's about thinking ahead to the next emerging trends like Web 3.0, blockchain, and the Metaverse, and developing a business about them. As future business models will be slightly different from those we use today, we need to remain sensitive and agile.

**What's your next company goal?**

We want to be a decacorn!  
(valuation of \$10 billion or more)



# Taiwan

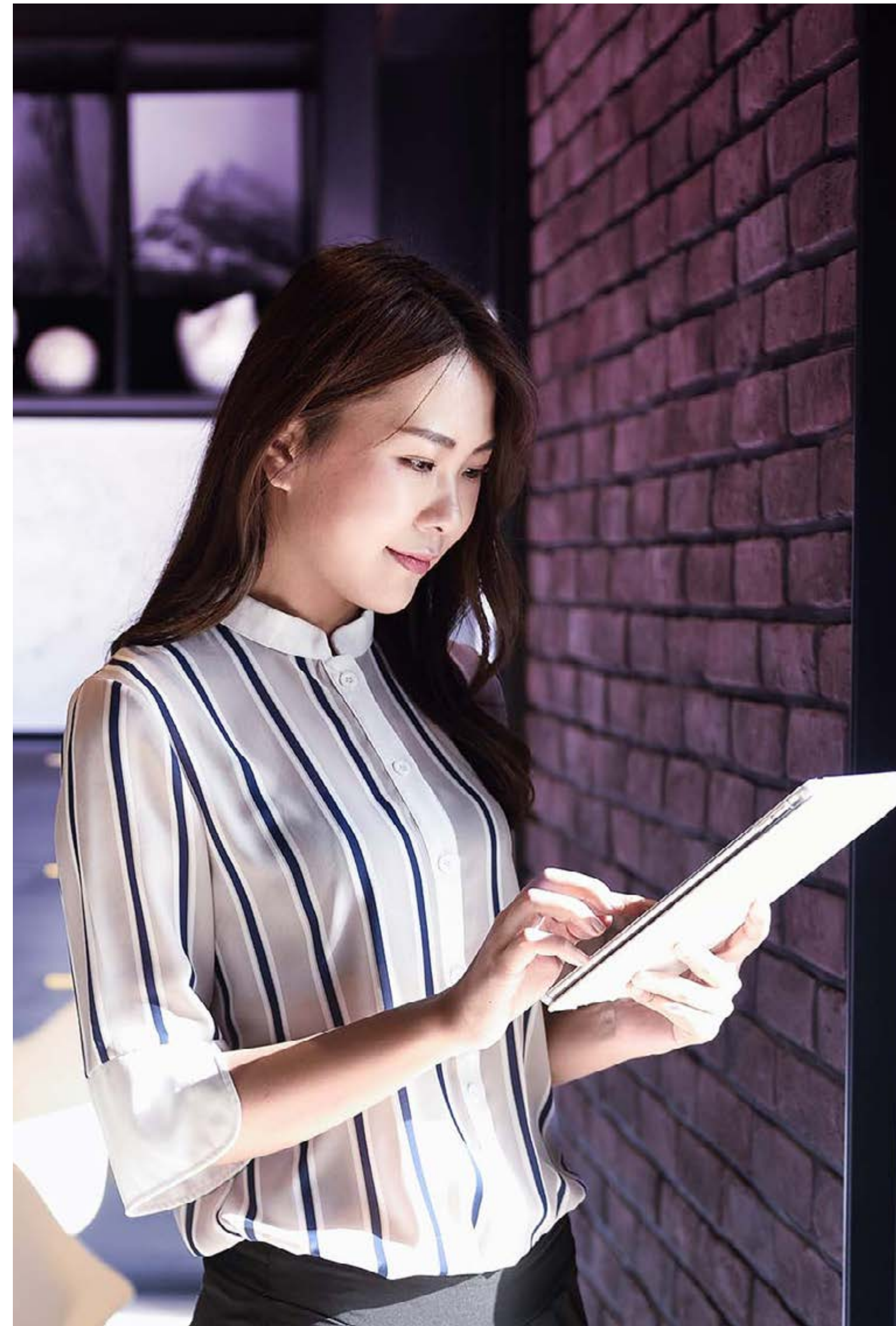
Taiwan's long history of developing and producing top-end electronics products makes it a strong contender for entrepreneurs looking to launch or grow a high-tech or IT manufacturing business.

Its many small technology manufacturing businesses offer good opportunities for collaboration. Prototypes, for example, can be developed and tested rapidly and cost efficiently. And the success of its leading company – Taiwan Semiconductor Manufacturing Company (TSMC), the world's most valuable semiconductor business – suggests the ultimate potential of such a tie-up.

The island's giant manufacturers are also major investors in start-ups, both in Taiwan and overseas. For example, electronics manufacturer Wistron, formerly part of computer firm Acer, as well as investing directly in new firms, has established a New Business Development Innovation Integration Center to supply start-ups with the support they need to convert an idea into a manufactured product and then to market and sell that product.

More recently, however, Taipei's just over 1,200 start-ups (as of 2021)<sup>20</sup> have also been expanding beyond hardware into other areas. In 2021, retail and wholesale accounted for 22 percent of Taiwan's followed by edge and quantum computing (16 percent), education technology (15 percent) and social media and communications (also 15 percent), according to the Taiwan Institute of Economic Research's annual start-up ecosystem survey.<sup>21</sup>

"Since early 2021, much has been happening," says Heidi Huang, Co-Head of Start-ups and Innovation, KPMG in Taiwan.



## Key economic indicators



**24 million**  
Population



**120.8**  
Mobile subscriptions per 100 people



**US\$28,306**  
GDP per capita



**22 million**  
Internet users



**29 million**  
Mobile subscribers



**91.7**  
Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	3.3	2.8	3.1	3.4	6.4	3.8

All data for 2020, except Internet users, which is for 2021.

Sources: Asian Development Bank (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>20</sup> See <https://tracxn.com/explore/Start-ups-in-Taipei> (accessed 5 May 2022).

<sup>21</sup> See "2021 Taiwan Start-up Ecosystem Survey".



## Leading 10 Emerging Giants

		Sector	Business
1	Maicoïn	Cryptocurrency/Blockchain, FinTech, TMT	Online cryptocurrency exchange and investment platform.
2	4Gamers	Esports, Gaming, TMT	Gaming platform offering esports organization related services.
3	OwlTing	Cryptocurrency/Blockchain, TMT	E-commerce and blockchain applications.
4	FunNow	Mobile, Mobile Commerce, TMT	Lifestyle platform provide instant booking services for entertainment and leisure events.
5	FaceHeart	Artificial Intelligence & Machine Learning, LOHAS & Wellness	Artificial intelligence technology for gathering real-time physiological information.
6	Linfiny	Manufacturing, Mobile, TMT	Digital paper device manufacturer for both consumer and professional markets.
7	PChomePay	FinTech, TMT	Online payment management and processing services.
8	iKala	Artificial Intelligence & Machine Learning, Marketing Tech, SaaS, TMT	AI-empowered digital transformation, influencer marketing, and social commerce
9	Style.Me	Artificial Intelligence & Machine Learning, E-Commerce, SaaS	Virtual fitting and styling solution aimed at driving sales for retailers through more personalized engagement with their customers.
10	Oomii	Augmented Reality, Virtual Reality	Developer of direct retinal projection near-eye display solutions for augmented reality

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**More and more hardware start-ups from Europe and the US are coming to Taiwan in search of investment from its giant electronics manufacturers.**

**Daisy Kuo**  
Co-Head of Start-ups and Innovation, KPMG in Taiwan





Thus far, the island has produced three unicorns. The highest profile of these is artificial intelligence firm Appier, which in March 2021 raised US\$130 million when became the first company to list on the Tokyo Stock Exchange since 1998. Backed by both Japan's Softbank and Singapore's state investment corporation Temasek, its AI-powered marketing platforms are used by major companies including Alphabet, Toyota and Estee Lauder.



**Taiwan has seen a steady growth rate in the amount of capital investments in early stage start-ups.**

**Stanley Hsiao**  
Head of Commercial Banking,  
HSBC Bank (Taiwan)



### More support for early-stage start-ups

Official support for start-ups is strong, focused both on developing a strong ecosystem and giving material support to new companies. Government-backed venture capital firm Taiwan Capital has since 2017 raised and invested US\$400 million in start-ups in areas including robotics, drones, IoT, artificial intelligence, enterprise software and autonomous systems.

The government has backed a host of initiatives, such as the Taiwan Tech Arena, a start-up hub bringing together academic and R&D talent, accelerators, investors and new companies under one roof. And the Taipei City Government provides grants of up to US\$1 million to new start-ups, rising to up to US\$3m for companies in incubators.

Corporate funding of start-ups plays a bigger role in Taiwan than in most locations, accounting for nearly half of venture capital investment, compared with a global average of around a quarter.

“But with other sources also increasing, early-stage start-ups can now secure funding far more easily than in the past,” KPMG’s Heidi Huang says. “We’ve also seen average funding size grow to reach the same scale as in other countries.”

The downside of Taiwan’s success, however, is rising costs, particularly for talent. “Previously, Taiwan had low-cost but high-quality staff. Now, the quality is still high, but so is their cost,” Daisy Kuo, Co-Head of Start-ups and Innovation, KPMG Taiwan adds.



**In the past, low valuations have been a pain point. However, now more funds are flowing into early-stage start-ups, so innovative firms can get funds far more easily than in the past.**

**Heidi Huang**  
Co-Head of Start-ups and Innovation, KPMG in Taiwan



## Featured interview MaiCoin

**Location:**

Taipei

**Founder and CEO:**

Alex Liu

**Launched:**

2013

**Sector:**

Fintech (cryptocurrency)

**Team:**

110

**VC:**

\$500 million

MaiCoin, short for Modernity Financial Holdings Ltd., is a leading digital asset brokerage in Taiwan offering a full range of crypto services: brokerage, exchanges, and blockchain solutions. MaiCoin also owns a minority stake in MaiCapital, a regulated cryptocurrency investment vehicle, and is making waves with NFT moves. Founder Alex Liu, who previously worked at some of the region's top tech players like Hitachi, Samsung, Siemens and Qualcomm, moved from Shanghai to Taipei to establish MaiCoin.

**What's your vision for the company?**

We want to make crypto pervasive and invisible. It's our mission and our opportunity. **The idea that the world has no borders has gained steam with the rise of digital assets.** In addition to generating profits and returns, we see our mission as helping our customers bring about positive change in their financial lives and redefining the conception of value.

**What are the current adoption tailwinds?**

The global crypto market has crossed \$1 trillion in total value and over 100 million users –putting crypto on a similar growth trajectory as the internet in the mid '90s. We are very accustomed to illiquid forms of value, like airline points locked into a system or hotel loyalty points.

**What is MaiCoin's differentiation in a competitive market?**

It's our full suite of crypto products. It's also our experienced management team from top tier technology and finance institutions. Our advisory board includes crypto-native leaders such as Vitalik Buterin (co-founder of Ethereum) and Charlie Lee (creator of Litecoin).

**What is the competitive risk?**

Taiwan is a champion market for cryptocurrency but at present it's not a crypto haven like Singapore. MaiCoin has an approximate 70% market share of crypto brokerage and exchange in Taiwan. As new users go out further on the risk curve for crypto assets, market leaders like MaiCoin will stand out as credible and dominant. However, once the Taiwanese market begins to truly flourish, MaiCoin will need to capitalize on its current market-leading advantage.

Otherwise, it's possible that larger global competitors could move in and command significant market share.

**What's driving crypto adoption?**

Crypto will have a lot of volatility, but it will appreciate over the long term. Generation Z and younger are less interested in stocks and drinking wine. But they are really into crypto.

**What's your NFT strategy?**

We want to be in the center of this burgeoning NFT space. We've invested in Lootex, a centralized NFT trading platform, and partnered with gaming platform SandBox to offer their token on our exchange. Also, we've recently launched carbon credit-backed NFTs and introduced the Qubic Creator service for brands to launch their own NFTs.

**How is MaiCoin addressing compliance and regulatory issues?**

We want to get all the fundamentals right. We have a compliance-first approach. It's going to be a bumpy road but we believe this is more sustainable for the long term, especially as regulation catches up to adoption. MaiCoin's relationship with Taiwanese authorities as well as tech investors with crypto exposure are a key differentiator in a space where regulatory compliance is paramount for business longevity.



# Thailand

2021 was a landmark year for Thai start-ups, with the minting of the country's first three unicorns - regional logistics and courier firm Flash Group, digital finance provider Ascend Money and cryptocurrency platform Bitkub.<sup>52</sup> The country is home to just over 2,100 technology start-ups, up from around 1,400 in early 2020.<sup>53</sup>

As was the case elsewhere across the region, the shift online during COVID-19 pandemic was a big stimulus for digital businesses in Thailand, with e-commerce, logistics and B2B digital transformation service providers all benefitting, notes Sasithorn Pongadisak, Partner and Head of Private Enterprise, KPMG Thailand. But also important to the growth story are Thailand's demographics — around 30% of the population is under 25 — and its already high mobile phone penetration rate of 165.7 subscriptions per 100 people.

The country is seeing strong activity across a range of new economy sectors. These range from insurance — led by InsurTech firm Sunday, the recipient in September 2021 of US\$45 million of funding from China's Tencent among others<sup>54</sup> — to food, where in SPACE-F Thailand has its first foodtech start-up incubator and accelerator.<sup>55</sup>



## Key economic indicators



**70 million**  
Population



**165.7**  
Mobile subscriptions per 100 people



**US\$7,187**  
GDP per capita



**37 million**  
Internet users



**116 million**  
Mobile subscribers



**52.9**  
Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	4.2	4.2	2.3	-6.1	1.6	3.9

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer (population).

<sup>52</sup> The Nation, 4 November 2021 "3 'unicorn' start-ups emerged in 2021".

<sup>53</sup> See: <https://tracxn.com/explore/Start-ups-in-Thailand>, <https://tracxn.com/d/soonicorn-awards/top-start-ups-in-thailand-tech-2020> (accessed 12 May 22).

<sup>54</sup> Techsauce.co, 6 September 2021, "Full-stack InsurTech Sunday Raises \$45M Series B Round from investors like Tencent, SCB 10X".

<sup>55</sup> Space-f.co, "About Us".



## Leading 10 Emerging Giants

	Sector	Business
<b>1</b>	<b>Eatigo</b> FoodTech, Mobile, Restaurant Technology, TMT	Online restaurant reservation platform offering time-based discounts for online bookings.
<b>2</b>	<b>aCommerce</b> E-Commerce, Industrials, Mobile, MobilityTech, Supply Chain Tech, TMT	E-commerce logistics platform providing customized e-commerce services for global brands.
<b>3</b>	<b>Rabbit Line Pay Company</b> FinTech, Mobile, TMT	Micro e-payment platform.
<b>4</b>	<b>Ookbee</b> E-Commerce, Mobile	Digital publication platform for users to create and share content.
<b>5</b>	<b>Diakrit</b> SaaS, TMT	IT integrated sales processes, photo and visualization services for the real estate industry.
<b>6</b>	<b>HotNow</b> Marketing Tech, TMT	Digital marketing application.
<b>7</b>	<b>The XR Company</b> Artificial Intelligence & Machine Learning, Augmented Reality, Virtual Reality	Virtual reality technology for visualizing data.
<b>8</b>	<b>T2P</b> FinTech, Mobile, TMT	E-wallet and payment gateway platform.
<b>9</b>	<b>DRVR</b> Mobility Tech, SaaS, Supply Chain Tech, Virtual Reality	Fleet analytics software for logistics and passenger vehicles.
<b>10</b>	<b>Stamp</b> Cybersecurity, Mobile, SaaS, TMT	Authentication platform for secure approval of mobile transactions at point of sale.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



**Thailand has made extraordinary progress in its transformation towards the digital economy. Thailand's e-commerce market is one of the fastest growing in Southeast Asia where gross online merchandise value grew by 68% in 2021.**

**Supanwongse Weeraworawit**  
Head of Global Liquidity and Cash Management, HSBC Thailand





### Funding support

Investment support for start-ups in Thailand is now entering the mainstream, with rapid growth in access to local sources of finance. Since 2017, many of the country's leading commercial banks have set up their own venture capital arms, most prominently Siam Commercial Bank (SCB) through its subsidiary, SCB 10X.

Thailand's state-owned enterprises have also been keen to back innovative newcomers. Oil and gas producer PTT, the Electricity Generating Authority and the Industrial Authority of Thailand have all signed up with InnoSpace (Thailand), a joint venture with the private sector that invests in the nation's start-up ecosystem.<sup>56</sup>

With the Stock Exchange of Thailand's recent launch of LiVE Exchange, a fundraising exchange for SMEs and start-ups, and the planned launch of a new digital asset exchange during 2022, young technology companies will have access to two additional sources of new funding.

### Official backing

Official backing for new economy companies is channeled through a range of bodies in Thailand. The National Innovation Agency is charged with devising and implementing programs aimed at developing Thailand's start-up ecosystem; while its Digital Economy Promotion Agency is developing Thailand Digital Valley in Chonburi, just to the southeast of Bangkok, as a major base for the country's start-ups.

A Start-up Act now being drafted is expected to put in place a range of tax incentives aimed at attracting investors and fee exemptions for intellectual property and standards registration. The Revenue Department is also drafting a law exempting investments in start-ups from capital gains tax.<sup>57</sup>

Looking to the future, Thailand's economic planning agency, the Office of the National Economic and Social Development Council, sees the pace of technology adoption accelerating across the economy. New services are likely to continue to emerge as businesses continue to digitize their online platforms for everything from tourism to health care. Further, the use of data analytics and artificial intelligence in the manufacturing sector is expected to increase the efficiency of supply chains.



**The launch of the LiVE Exchange is really important for SMEs, because it gives new companies a major new way to raise funds from the capital market.**

**Sasithorn Pongadisak**  
Head of Private Enterprise,  
KPMG in Thailand



<sup>56</sup> See <https://www.bangkokpost.com/business/1693428/innospace-seeking-b640m> (accessed 12 May 2022).

<sup>57</sup> Bangkok Post, 1 February 2022 "Tax waiver set to boost financing of Thai start-ups"



## Featured interview aCommerce Group Public Company Limited

### Leadership:

Paul Srivorakul, Group Chief  
Executive Officer

### Location:

Bangkok

### Business:

The largest end-to-end  
e-commerce enabler and unified  
software provider in Southeast  
Asia

### Founded:

2013

### Clients:

213

### What is the status of e-commerce in Southeast Asia?

Business practices in Southeast Asia are highly unique due to geography and culture, and we see a major digital transformation in the e-commerce market regionally, catapulted by the COVID-19 pandemic, which has set the region on a course of 19.8% (CAGR) estimated growth through 2025. We also saw steady growth when it comes to Gross Market Value as it grew from US\$9,262 million in 2016 to US\$52,302 million in 2020.

We see plenty of new sales and marketing channels, go-to-market strategies, fintech solutions, technologies, payment methods, innovation, and creativity.

It is truly an ever-evolving and growing market as disposable income rises and internet access improves. Yet e-commerce in Southeast Asia is only in its infancy.

### What is your company's overall mission?

Our vision is to enable brands to connect, engage, and transact with their end-consumers anywhere, anytime, and in any way, making e-commerce easy in Southeast Asia.

### How is the company innovating?

Our EcommerceIQ platform provides a single integrated dashboard for clients to centralize inventory, unify data and analytics, and exercise control over pricing, merchandising, and marketing while reducing consumer acquisition costs by providing complete visibility over the entire value chain.

Market Insights is one of the innovative features of EcommerceIQ. Market Insights is a comprehensive business intelligence analytics for retailers in Southeast Asia and unifies all e-commerce data under one cloud platform. From a business perspective, the platform enables us to capture a massive \$50 billion mid-market Software-as-a-Service (SaaS) opportunity that keeps growing as e-commerce accelerates.

We have invested over \$23 (800m THB) million in technology development since 2013, and it gives us a substantial advantage over our competitors who employ manual operations. This SaaS model allows us to onboard clients quickly, reducing cost-to-serve significantly.

### How is the company managing fast growth?

We have grown by 39.5% CAGR from 2019 to the end of 2021, while the merchandise volume we represent has increased by 51.6% CAGR. Additionally, order volumes were 8.02 million at the end of 2021, representing an 11.2% year-on-year gain.

Our focus is on profitable long-term growth, and we seek to benefit from increased operating leverage.

As part of our recalibration and strategic refocusing initiated in mid-2019, we began shifting our client portfolio towards more profitable retailers to support our solvent long-term growth strategy. The strategy has been executed through contract re-negotiations and increasing our internal hurdle rates.

We manage our expansion organically in our existing markets by investing in our clients' success. We provide more support functions and we partner with enterprise platforms that will complement our current offerings and bolster our footprint.

### What is the competitive landscape for e-commerce?

The market is fluid, fragmented, and subject to changing regulations, evolving technology, shifting merchant preferences and end-consumer demands, and new payment options such as digital wallets and cryptocurrencies. There are new entrants and several competitors, but most only handle a specific section of the e-commerce value chain and are very small regionally.

We saw an opportunity to become the first enabler with cutting-edge technologies and offer our clients innovative solutions engineered to answer the requirements of a highly customizable solution tailored to their needs and e-commerce progress, including near real-time competitor analysis and business analytics.

### What is your company's key differentiator?

We differentiate ourselves from smaller start-ups by providing enterprise-scale, security, consistency, agility, and dependency. We are the only e-commerce enabler to support clients requiring an effective and consistent multi-country strategy in five key markets in Southeast Asia, with strategies tailored to localized solutions in each.

Our regional presence allows us to develop tailored strategies providing localized solutions in each market, and that makes us ideal partners to 13 out of the top 100 global brands. In addition, our EcommerceIQ platform expands the execution gap between ourselves and competitors with the ability to automate manual processes.



**How is your customer base shifting?**

Our core customer base remains large enterprise-grade global clients in fashion, consumer goods, beauty, electronics, luxury, and healthcare.

As e-commerce grows in the region, we plan to expand into new verticals such as toys, home & gardening, and other high-margin, cash flow generating categories. We also see mid-market brands and retailers needing our enterprise SaaS products as they scale.

**What are the geographic expansion opportunities?**

Thailand continues to be our regional headquarters and our largest market. Indonesia is our second-largest market, followed by the Philippines and Singapore.

We recently entered Malaysia and we are rapidly getting momentum there. We plan to expand into Vietnam later in 2022.

**How would you describe your company culture?**

Our culture is centered around learning, adapting, and growing to remain competitive and innovative.

We place great importance on attracting and retaining the most talented and qualified team members.

We have an experienced management and founding team who have built businesses in media, advertising, e-commerce, and logistics, and so far, we have expanded by hiring experts in specific areas.

As we grow, we must preserve our corporate culture, which is a prime factor in our ability to drive innovation, teamwork, passion, curiosity, and diversity.





# Vietnam

Vietnam has one of Asia's newest and most dynamic start-up scenes. Home to just 1,600 start-ups at the start of the COVID-19 pandemic, that total has jumped to more than 3,000 now, according to start-up data platform Tracxn - including the country's four unicorns.

Driving the country's digital economy is a large, young population willing to test and adopt new technology consumer services, supportive government policies, and a surge in overseas funding.<sup>58</sup>

Although Vietnam's per capita GDP remains relatively low compared to others in the region, its economy is expanding faster than any other market. Growth is predicted to hit 5.5 percent in 2022 and 6.5 percent in 2023, near pre-COVID-19 expansion levels, according to World Bank estimates.<sup>59</sup>

Ho Chi Minh City-headquartered super-app provider VNG is Vietnam's longest-standing successful start-up to date.

Launched in 2004 as a gaming business, but now with offerings including chat app Zalo, which now has more than 60 million users, and e-wallet, ZaloPay, it reached unicorn status as far back as 2014.<sup>60</sup>

Investors in the company include Singapore's Temasek, China's Tencent and Goldman Sachs.

Riding the surge in e-commerce, deliveries and online media boosted by the pandemic, VNLife, operator of B2B mobile payment provider VNPAY, became Vietnam's second unicorn in 2020.

Venture capital deals surged to US\$1.1 billion in 2021, up from \$301 million in 2020 and \$330 million in 2019.<sup>61</sup>

<sup>58</sup> Source: <https://tracxn.com/d/soonicorn-awards/top-start-ups-in-vietnam-tech-2020>, <https://tracxn.com/explore/Start-ups-in-Vietnam>

<sup>59</sup> World Bank press release, 13 January 2022, <https://www.worldbank.org/en/news/press-release/2022/01/13/vietnam-economic-growth-is-expected-to-accelerate-to-5-5-in-2022-and-greening-its-trade-would-offer-new-opportunities>

<sup>60</sup> See <https://asia.nikkei.com/Business/Business-Spotlight/Vietnam-s-first-unicorn-bets-on-AI-and-overseas-growth> (accessed 12 May 2022).

<sup>61</sup> KPMG and HSBC analysis of Pitchbook data, please see chart on p. 9



## Key economic indicators



**97 million**

Population



**143.3**

Mobile subscriptions per 100 people



**US\$2,786**

GDP per capita



**68 million**

Internet users



**139 million**

Mobile subscribers



**70.1**

Internet users per 100 people

	2017	2018	2019	2020	2021	2022f
GDP growth, %	6.8	7.1	7.0	2.9	2.6	5.5

All data for 2020, except Internet users, which is for 2021.

Sources: World Bank (GDP, GDP per capita), ITU (mobile subscriptions, internet users), Worldometer



## Leading 10 Emerging Giants

		Sector	Business
1	Propzy	Real Estate Technology, TMT	Real estate platform.
2	Sipher	Cryptocurrency/Blockchain, FinTech, Gaming	Gaming studio for multiplayer dungeon PC game using blockchain technology.
3	Sendo	E-Commerce, SaaS, TMT	E-commerce consumer products shopping portal.
4	Jio Health	Digital Health, HealthTech, Mobile, SaaS	Healthcare platform providing instant access to online clinical services.
5	Clevai	EdTech	Online education platform for underserved students.
6	CoolMate	E-Commerce	Online men's clothing retail portal.
7	EveHR	HR Tech	Online platform for increasing employee retention and engagement.
8	Lozi	AgTech, E-Commerce, Mobile, Supply Chain Tech	E-commerce delivery platform designed to connect buyers and sellers to cater to the growing demand for online shopping.
9	VUI	FinTech, SaaS	Financial software designed to offer financial saving solutions for employees.
10	HomeBase	Real Estate Technology	Real estate lending platform intended to provide customized financing to purchase and own homes and properties.

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data



Vietnam has emerged as a hub for start-ups, closely competing with the likes of Indonesia and Singapore. With a young, energetic and educated population, high smartphone and internet penetration, and strong government support, Vietnam should maintain its position as a compelling destination for tech entrepreneurs and investors, making the country a thriving environment for potential unicorns.

Tim Evans  
CEO, HSBC Vietnam







“  
**Vietnamese consumers are internet savvy and technologically adaptive. That means all Vietnamese companies now need to have a digital strategy to stay relevant.**

**Kien Nguyen**  
KPMG Private Enterprise,  
KPMG in Vietnam

By year-end, two more companies were also unicorns: game developer Sky Mavis and the country's most widely used e-wallet, MoMo. “Strong funding is coming from Asia, especially Singapore, followed by South Korea, China and Hong Kong, and Japan,” says Kien Nguyen, KPMG Private Enterprise at KPMG in Vietnam.

“Nearly all of this money has gone to companies addressing the domestic market. Local demand should stay strong for the next two or three years before there's any need for consolidation, or for global or regional strategies,” adds Nguyen.

### Government focus on growth

The Vietnamese government provides some support for new economy firms through its National Technology Innovation Fund, and as far back as 2017 it set up a FinTech Steering Committee to formulate and submit an annual action plan to the State Bank of Vietnam on the building of an appropriate ecosystem.

But aside from ensuring that the country's telecom infrastructure remains held by state-owned companies, and local firms (most of them private) control data services, it has largely allowed Vietnamese start-ups a free hand to chart their own path.

“At the app level, there's very little state involvement,” says Luke Treolar, Head of Strategy at KPMG Vietnam. “That layer of Vietnam's digital economy is more or less completely private.”

In the medium term, the big question now is whether it will adopt China's model, with greater official oversight and tighter regulation or stick with its current open approach. For now, however, growth is expected to continue to be the main focus.

While e-commerce accounts for less than 5% of all retail sales, its value rose by more than half in 2021. “Similar rates of high growth rate can be expected for the next several years,” says Treolar. If that happens, Vietnam will have Southeast Asia's second biggest digital economy, behind Indonesia, by the end of the decade.”

“  
**E-commerce accounts for less than 5% of retail in Vietnam. In China, it's around a third. That means the potential for growth is huge.**

**Luke Treolar**  
Head of Strategy and National  
Head of Healthcare and Life Sciences,  
KPMG in Vietnam

<sup>56</sup> See <https://www.bangkokpost.com/business/1693428/innospace-seeking-b640m> (accessed 12 May 2022).

<sup>57</sup> Bangkok Post, 1 February 2022 “Tax waiver set to boost financing of Thai start-ups”



## Featured interview

# Loship

**Location:**  
Ho Chi Minh City

**Founded:**  
2018

**Co-founder and CEO:**  
Trung Nguyen

**Sector:**  
e-commerce logistics

**Revenues:**  
\$30 million

**GMV:**  
\$180 million

**Customers:**  
2 million monthly active  
customers

**VC:**  
\$20 million, most recently \$12  
million at a \$100 million valuation

**Investors:**  
Ant Group-backed BAce Capital,  
Skype co-founder Jaan Tallinn,  
Golden Gate Ventures and 13  
others

Dropping out of college to become an entrepreneur, Loship Co-founder and CEO Trung Nguyen has built an e-commerce logistics business in Vietnam currently valued over US\$100 million. The company's quick commerce platform Loship taps into the e-commerce potential of Vietnam's almost 100 Million population, concentration of young and well-educated people in 20 cities on a single land mass, and 75% Internet penetration.

### What is the unique selling point for Loship?

We focus only on local business. We bring local sellers online and offer one-hour delivery in more than 15 cities nationwide in Vietnam. We operate a hyper-local business and work with 250,000 local merchants. We skip the warehouse and deliver directly from the merchandiser or fulfillment service to the customer. We call this "3rd generation e-commerce": a small selection of merchandise from local stores or mini-warehouses, with speedy, last-minute delivery often to single-person households.

As people have become busier and busier, they are willing to pay more for the extra convenience of fast delivery on a motorbike. **We are the inventor of the quick commerce model in Southeast Asia.**

### What sorts of items do you deliver most often?

Everything from food to cosmetics to medicine to flowers to pet supplies to laundry. We have a small selection of items so we can deliver fast. We're the number one deliverer in many categories, and the second-biggest food delivery service in Vietnam. Ingredients are a big seller for us, as well as disposable utensils and beer. We negotiate with the manufacturers and merchants to get a volume discount on these items.

### How has the business been during COVID?

Loship was the most downloaded app during the previous lockdown in Vietnam. Our business growth rate during Covid was 2.6 times. Now people have become used to shopping online. In addition, we are seeing a massive shift to e-commerce in Vietnam over the next five years from about 3% of the market now.

### What's your biggest asset?

Our driver network. We have 70,000 drivers, no small number. Our drivers deliver directly to the consumer. Unlike other logistics services, we have a "driver first" strategy. We believe if we take care of the drivers well, they will take care of customers for us. We offer our drivers a revenue share of 85% of the delivery fee. This is not like the 35% Uber model for its drivers. We offer loyalty incentives such as providing credit to qualified drivers. Drivers also have free water, bike care and charging at stations around the city.

### How do you compete with other e-commerce businesses in Vietnam?

There's fierce competition in this market. We have a local identity. We have the largest number of local merchants, with an 11% market share.

We offer merchants the quickest cash turnover. In comparison, other platforms freeze the merchant's money for two to four weeks.

### How else does the business model differ from competitors?

With our B2B ingredients business, merchants can buy ingredients through us directly from the manufacturer at the best price. We earn a high margin by cutting the multi-layer network. On average, merchants spend \$50 a month to buy from Loship. To my knowledge, we are the only ones in Vietnam doing this upstream business.

### What's your revenue model?

Advertising from sellers is about 10% of our revenues, a 20% commission on sold items accounts for 89% of our total revenues, and the last 1% is from the delivery fee, based on distance. We take 15% of that delivery fee.

### What's your business roadmap?

We want to expand regionally into Laos and Cambodia. These are must-win markets. We want to be profitable, and we have big ambition to go public on the NYSE.

### Who are some of your company's advisors and mentors?

We have world-class angels and mentors such as a VP from Starbucks, a head of Alipay India, and a co-founder of Skype.



Appendix

# Leading 100 Emerging Giants in Asia Pacific

Rank	Company	Origin	Sector(s)	Business
<b>1</b>	BioMind	Mainland China	Artificial Intelligence & Machine Learning, HealthTech, Oncology	Healthcare diagnosis technology
<b>2</b>	BrightChamps	India	Artificial Intelligence & Machine Learning, EdTech	E-learning platform
<b>3</b>	HIPAC	Mainland China	E-Commerce, TMT	E-commerce platform
<b>4</b>	HuoMaoTV	Mainland China	Esports, Gaming	E-sports platform
<b>5</b>	InterGlobe Technology Quotient	India	SaaS, TMT	Computerized reservation system for the hotel and travel industry
<b>6</b>	Juspay	India	FinTech, Mobile, Mobile Commerce, SaaS, TMT	Software for mobile-based payment platforms
<b>7</b>	One (China)	Mainland China	E-Commerce	E-commerce platform
<b>8</b>	Catheon Gaming	Hong Kong (SAR), China	Cryptocurrency/Blockchain, Gaming	Play-to-earn gaming platform
<b>9</b>	Spenmo	Singapore	B2B Payments, FinTech	Payment software and technology
<b>10</b>	Tridge	South Korea	AgTech, Supply Chain Tech	Agri-tech trading platform



Rank	Company	Origin	Sector(s)	Business
<b>11</b>	VisionNav Robotics	Mainland China	Advanced Manufacturing, AgTech, Artificial Intelligence & Machine Learning, Autonomous cars, Internet of Things, Manufacturing, Robotics and Drones, Supply Chain Tech	Automated guided industrial vehicles
<b>12</b>	Avatar Technology	Mainland China	Artificial Intelligence & Machine Learning, Autonomous cars, CleanTech, Mobility Tech	New energy automobiles
<b>13</b>	Hongquan CRM	Mainland China	Big Data, Marketing Tech, SaaS	Mobile sales management cloud services for enterprises
<b>14</b>	Zhiyan Technology	Mainland China	Artificial Intelligence & Machine Learning	Smart home products
<b>15</b>	Jimu	Mainland China	FinTech, TMT	Peer-to-peer lending services
<b>16</b>	Microquanta Semiconductor	Mainland China	CleanTech, Manufacturing	Solar cell modules
<b>17</b>	Finder	Australia	FinTech	Fintech platform
<b>18</b>	iQiyi Sports	Mainland China	Mobile	Sports media and news platform
<b>19</b>	Kuro Game	Mainland China	Gaming, Mobile	Mobile 3d games and visual effects
<b>20</b>	Ki Mobility Solutions	India	E-Commerce, Industrials, TMT	Auto maintenance and repair services and online retailer
<b>21</b>	CanaanTek	Mainland China	Internet of Things	5G-enabled semiconductor products for use in consumer smart devices

Rank	Company	Origin	Sector(s)	Business
<b>22</b>	Huayu	Mainland China	EdTech, Mobile, SaaS, TMT	Online education platform
<b>23</b>	JOYNEXT	Mainland China	Advanced Manufacturing, Autonomous cars, Internet of Things, Mobility Tech	Autonomous vehicle technology
<b>24</b>	Memsonics	Mainland China	Advanced Manufacturing, Manufacturing	Micro-electromechanical system (MEMS) technology-enabled products
<b>25</b>	Hyperchain Technology	Mainland China	Cryptocurrency/Blockchain, FinTech, SaaS, Supply Chain Tech, TMT	Enterprise blockchain solutions
<b>26</b>	Teachmint	India	EdTech, Mobile, SaaS	Virtual education platform
<b>27</b>	ixigo ixigo (Le Travenues Technology Limited)	India	E-Commerce, Mobile	AI-based travel application
<b>28</b>	Beijing JingPinTe Zhuang	Mainland China	Advanced Manufacturing, Industrials, Manufacturing, Robotics and Drones	Photoelectric reconnaissance equipment and military robots
<b>29</b>	HiScene	Mainland China	Artificial Intelligence & Machine Learning, Augmented Reality, CloudTech & DevOps, SaaS, TMT	Virtual reality hardware and software for engineering/ industrial work
<b>30</b>	Airtel Payments Bank	India	FinTech, Mobile, Mobile Commerce, TMT	Mobile banking services
<b>31</b>	Baijiayun	Mainland China	Artificial Intelligence & Machine Learning, CloudTech & DevOps, SaaS, TMT	Cloud-based live broadcast software/platform



Rank	Company	Origin	Sector(s)	Business
<b>32</b>	Cygames	Japan	Augmented Reality, Gaming, Mobile, TMT	Online gaming
<b>33</b>	CDP (China)	Mainland China	HRTech, Industrials, SaaS, TMT	Human capital management services
<b>34</b>	Qyer	Mainland China	Mobile, TMT	Digital travel services
<b>35</b>	BaofengTV	Mainland China	Artificial Intelligence & Machine Learning	Internet smart tv
<b>36</b>	Imrfresh	Mainland China	Mobile	E-commerce platform
<b>37</b>	Atlan	India	Artificial Intelligence & Machine Learning, Big Data, Mobile, TMT	Data intelligence platform
<b>38</b>	Jianke.com	Mainland China	E-Commerce, HealthTech, TMT	Online retail for medicine and pharmaceuticals
<b>39</b>	Caddi	Japan	Industrials, Supply Chain Tech	Order management platform for manufacturers
<b>40</b>	Stader Labs	Singapore	Cryptocurrency/Blockchain, FinTech, SaaS	Decentralized financial protocol and applications
<b>41</b>	Ancun.cc	Mainland China	Big Data, Cybersecurity	Data management systems
<b>42</b>	KY Express	Mainland China	Supply Chain Tech	Integrated logistics service

Rank	Company	Origin	Sector(s)	Business
<b>43</b>	Linkface (Beijing)	Mainland China	Artificial Intelligence & Machine Learning, Big Data	Facial recognition technology
<b>44</b>	Zmeng Network Technology	Mainland China	AdTech, Artificial Intelligence & Machine Learning, Big Data, E-Commerce, Internet of Things, Marketing Tech, Mobile, Mobile Commerce, SaaS	AI and big data-powered business intelligence platform for SMEs
<b>45</b>	Leadmicro	Mainland China	CleanTech, Manufacturing, Nanotechnology	Advanced thin film deposition and etch equipment for industrial producers
<b>46</b>	yellow.ai	India	Artificial Intelligence & Machine Learning, Mobile, TMT	Conversational ai platform aimed at automating customer and employee experience
<b>47</b>	Re-Fire Technology	Mainland China	CleanTech, ClimateTech, MobilityTech	Fuel cell systems and hydrogen fuel cell vehicle powertrain engineering
<b>48</b>	Mswipe	India	FinTech, Mobile, Mobile Commerce	Mobile point of sale terminal
<b>49</b>	42dot	South Korea	Autonomous cars, E-Commerce, Mobility Tech, Ridesharing, Robotics and Drones, SaaS, Supply Chain Tech	Autonomous transportation-as-a-service platform
<b>50</b>	Waresix	Indonesia	Industrials, Supply Chain Tech	Online logistics platform
<b>51</b>	AM Advertising	Mainland China	AdTech, TMT	Digital marketing services
<b>52</b>	Beijing GEOWAY Software	Mainland China	Artificial Intelligence & Machine Learning, Big Data	Geospatial information technology solutions



Rank	Company	Origin	Sector(s)	Business
<b>53</b>	Smartisan Technology	Mainland China	Mobile, SaaS, TMT	Smartphones and electronic devices
<b>54</b>	Incesoft	Mainland China	Advanced Manufacturing, Artificial Intelligence & Machine Learning, Big Data, Robotics and Drones	Robotics and ai technology
<b>55</b>	Happy Sharing	Mainland China	E-Commerce, TMT	Second-hand goods sharing platform
<b>56</b>	Gramophone	India	AgTech, E-Commerce, Mobile, Supply Chain Tech	Agri-tech platform
<b>57</b>	BlueStone	India	E-Commerce	Online and offline retail for jewellery
<b>58</b>	jss.com.cn	Mainland China	FinTech, Supply Chain Tech	Fintech platform
<b>59</b>	Atama +	Japan	Artificial Intelligence & Machine Learning, EdTech	Adaptive learning platform
<b>60</b>	Wiseco Technology	Mainland China	Big Data, FinTech	Fintech provider focusing on credit score analysis
<b>61</b>	Deltaphone	Mainland China	Advanced Manufacturing, Artificial Intelligence & Machine Learning, Big Data, Internet of Things	IoT and AI software
<b>62</b>	Yes! Go Technology	Mainland China	Artificial Intelligence & Machine Learning, Big Data, Internet of Things, SaaS	Unmanned convenience stores
<b>63</b>	Hydbest	Mainland China	FinTech	Peer-to-peer lending services

Rank	Company	Origin	Sector(s)	Business
<b>64</b>	Conflux Network	Mainland China	Cryptocurrency/Blockchain, FinTech, SaaS	Blockchain technology
<b>65</b>	Drivezy	India	Car-Sharing, ClimateTech, Micro-Mobility, Mobile, MobilityTech	Vehicle rental platform
<b>66</b>	Huibao Technology	Mainland China	Mobility Tech	Mobility tech platform for automotive maintenance services, insurance and loans
<b>67</b>	Maicoi	Taiwan	Cryptocurrency/Blockchain, FinTech, TMT	Cryptocurrency exchange and investment platform
<b>68</b>	Multiplier (Singapore)	Singapore	HRTech, Industrials, SaaS	Hr services platform
<b>69</b>	Qingsongchou Network	Mainland China	FinTech, TMT	Online crowdfunding platform
<b>70</b>	Shanzhen	Mainland China	HealthTech, LOHAS & Wellness	Healthtech platform
<b>71</b>	MGL New Materials	Mainland China	CleanTech, ClimateTech, Manufacturing	Manufacturer of cathode materials for lithium-ion batteries
<b>72</b>	Shenzhen Thunderbird Network Technology	Mainland China	Internet of Things, TMT	Internet tv services
<b>73</b>	Xinhua Zhiyun	Mainland China	Artificial Intelligence & Machine Learning, Big Data, Robotics and Drones, SaaS	Ai platform for online media



Rank	Company	Origin	Sector(s)	Business
<b>74</b>	Ickey	Mainland China	E-Commerce	E-commerce platform for electrical supplies and components
<b>75</b>	Global Mobility Service	Japan	FinTech, Internet of Things	Lending services for vehicle purchases
<b>76</b>	Mini Vision	Mainland China	Artificial Intelligence & Machine Learning, FinTech	Computer vision technology
<b>77</b>	PERA Global	Mainland China	3D Printing, Advanced Manufacturing, Manufacturing	Industrial simulation software and 3D printing technology
<b>78</b>	Che300.com	Mainland China	Artificial Intelligence & Machine Learning, Big Data, Industrials, MobilityTech, TMT	Third-party pricing service platform for second-hand cars
<b>79</b>	Doosan Robotics	South Korea	Manufacturing, Robotics and Drones	Industrial robots
<b>80</b>	Sinoiov	Mainland China	Commercial Services, Logistics, Big Data	Freight vehicle monitoring platform
<b>81</b>	Makeblock	Mainland China	Services (Non-Financial), Educational and Training Services (B2C), EdTech, Robotics and Drones, Supply Chain Tech	Do-it-yourself (DIY) robotics construction and programming learning platform provider
<b>82</b>	Sunyur	Mainland China	Software, Business/Productivity Software, B2B Payments, SaaS, Supply ChainTech, TMT	Digital procurement solutions for enterprises
<b>83</b>	Wanjiaan	Mainland China	Software, Business/Productivity Software, CloudTech & DevOps, Internet of Things, TMT	AI and IoT solutions and products
<b>84</b>	Watrix Technology	Mainland China	Commercial Services, Security Services (B2B), Artificial Intelligence & Machine Learning, Big Data, TMT	Gait recognition technology for surveillance

Rank	Company	Origin	Sector(s)	Business
<b>85</b>	Kuyun Interactive Technology	Mainland China	Software, Business/Productivity Software, Big Data, SaaS	Consumer data platform for television and media companies
<b>86</b>	Onion Academy	Mainland China	Software, Educational Software, Artificial Intelligence & Machine Learning, Big Data, EdTech, TMT	Science and technology online education platform for primary and secondary students
<b>87</b>	Twenty First Century Aerospace Technology	Mainland China	Commercial Products, Aerospace and Defense, Big Data	Space remote sensing and big data services
<b>88</b>	Vision Medicals Technology	Mainland China	Healthcare Services, Laboratory Services (Healthcare), Artificial Intelligence & Machine Learning, Big Data, Life Sciences, Oncology	Genetic diagnostic technology for precision medical treatment
<b>89</b>	dayi35.com	Mainland China	Commercial Products, Industrial Supplies and Parts, E-Commerce, Supply Chain Tech, TMT	E-commerce platform for raw plastic materials
<b>90</b>	FineEx	Mainland China	Commercial Services, Logistics, E-Commerce, Industrials, MobilityTech, Supply Chain Tech, TMT	Logistics service platform
<b>91</b>	Huoli Tianhu	Mainland China	Commercial Services, Media and Information Services (B2B), Big Data, Mobile, TMT	Personalized travel services platform
<b>92</b>	Jar (Financial Software)	India	Software, Financial Software, FinTech	Fintech application allowing users to save and invest in digital gold
<b>93</b>	Niyo	India	Software, Financial Software, FinTech, Mobile, TMT	Payroll management platform
<b>94</b>	WinZO	India	Software, Entertainment Software, Esports, Gaming	E-sports gaming platform





Rank	Company	Origin	Sector(s)	Business
<b>95</b>	Secure Code Warrior	Australia	Software, Software Development Applications, CloudTech & DevOps, Cybersecurity, SaaS	Secure coding platform for in-house and outsourced developers
<b>96</b>	Miao Health	Mainland China	Healthcare Technology Systems, Medical Records Systems, Artificial Intelligence & Machine Learning, Big Data, Digital Health, TMT	Healthtech platform
<b>97</b>	Omniscient	Australia	Healthcare Technology Systems, Other Healthcare Technology Systems, Artificial Intelligence & Machine Learning, CloudTech & DevOps, Mobile	Software provider for neurosurgery, neurology, and neuroscience
<b>98</b>	FiNC	Japan	Healthcare Technology Systems, Enterprise Systems (Healthcare), HealthTech, LOHAS & Wellness, Mobile	AI-enabled healthtech platform
<b>99</b>	Remebot	Mainland China	Healthcare Devices and Supplies, Surgical Devices, Robotics	Developer of navigation & orientation robot for neurosurgery
<b>100</b>	Eucalyptus	Australia	Digital health, healthcare technology systems	Digital healthcare/telehealth platform provider

Source: KPMG and HSBC analysis of 6,472 companies originating in Asia Pacific with valuations of US\$500 million or less, based on Pitchbook data

Disclaimer: The selection of the Emerging Giants in Asia Pacific mentioned in this report (including Leading Emerging Giants lists in each of 12 Asia Pacific markets and the Asia Pacific 100 Leading Emerging Giants list) aim to increase market attention to innovative technology-focused new economy enterprises which are growing in prominence in their respective markets, with the purpose of promoting the advancement and maturity of start-up ecosystems regionally. Selection for these lists is based on KPMG and HSBC analysis of Pitchbook data, referencing latest current valuations as reported by Pitchbook on 30 April 2022. Sector verticals identified are based on Pitchbook sector vertical data tagging associated with the mentioned companies as of 30 April 2022. Identified sector verticals are: 3D printed Buildings, 3D Printed Foods, 4D printing, AI in Foodtech, AI Ops, AI-Enhanced Learning, AI-Powered Drug Discovery, Air Taxis, Alternative Home Financing, Anti-Aging, Art Trading Platforms, Assistive Tech, Autonomous Delivery, Auto Commerce, Autonomous Flight, Autonomous Shipping, Autonomous Trucking, Autonomous Vehicle Stimulation, Banking as a Service, Batteryless IoT Sensors, Blockchain Real Estate, Cashierless Checkout, Climate Risk Modelling-as-a-service, Cloud Gaming, Cloud Workload Protection, Cognitive Computing, Commercial Space Launch, Computational Storage, Concentrated Solar Power, Connected Fitness Equipment, Construction Robots, Contract Management Automation, Conversational Banking, CRISPR Diagnostics, Crowdsourced Testing, Data Centre Cooling Tech, Database Sharing, Decentralized Autonomous Organizations, Decentralized Finance, Desalination Tech, DevSecOps, Digital Avatars, Digital Freight Brokerage, Digital Twins, DNS Data Storage, Edge Computing Semiconductors, eDiscovery Platforms, Election Tech, Electric Flight, Electric Vehicle Platforms, Electric Vehicle Charging Infra, Fertility Tech, FinOps, Food Service Robots and Machines, Gene Therapies, Generative AI, Graph Databases and Analytics, Hyperloop, Indoor Mapping, In-Space Manufacturing, IoT Security, Lidar, Lithium Extraction Technology, Lithium Ion Battery Recycling, Livestream Commerce, Long Duration Energy Storage, Low Code / no Code, Medical Exoskeletons and Prosthetics, Medical Robotics, Mental Health Tech, Micro Insurance, Microweather, Mining Tech, Nanomedicine, Natural Disaster Preparedness and Response, Neurotechnology, Next Gen Network Security, Next Generation Battery Tech, NFTs, Ocean Data Collection, Passwordless Authentication, PayFac Enablers, Pollination Tech, Post Quantum Cryptography, Psychedelics, Quantum computing, Real Estate Crowdfunding, Renewable Ocean Energy, Resilient PNT, Robotic Process Automation, Security Deposit Alternatives, Security Orchestration, Automation and response, Service Mesh, Silicon Photonics, Sleep Tech, Small Satellites, Smart clothing, Smart Grid, Smart Home Assistants, Smart Jewellery, Smart Locks, Smart Mirrors, Smart Packaging, Smart Waste Management, Social Audio, Space Tourism, Sports Tech, Supersonic Travel, Sustainable Fashion, Sustainable Packaging, Swarm AI, TinyML, Urban Planning Tech, V2X, Virtual Events, VR Health, Warehouse Management Tech, and Youth Banking. Selection for these lists does not constitute an endorsement of specific companies, brands, products or services by KPMG or HSBC, nor does it constitute an evaluation or endorsement of the valuation of any company, nor does it evaluate the compliance and investability of the mentioned companies or interpret any regulatory policy. All included information is for reference only. While every attempt is made to ensure accuracy, neither KPMG nor HSBC can guarantee accuracy or reliability of the information provided.



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