SINGAPORE VENTURE FUNDING LANDSCAPE 2024

A Nine-Month Report







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METHODOLOGY AND DEFINITIONS

- Reports are prepared in accordance with PitchBook's methodology*. In this edition
 of the report created by Enterprise Singapore (EnterpriseSG), PitchBook
 methodologies were examined to ensure that they are aligned with methodologies
 adopted in the previous editions. To keep figures congruent between report
 editions, pre-2024 data was sourced from previous reports created by EnterpriseSG,
 with 2024 data sourced primarily from PitchBook with supplemental deals data
 sourced from EnterpriseSG.
- It should be noted that given PitchBook's depth of data coverage, comparing figures for 2024 with historical data from another data provider may display disparities that could skew YoY calculations.
- All chart time frames are global unless otherwise noted. The data is based on a global scale. All monetary values in this report are in US dollars.
- The term "ASEAN" is used as a shorthand for "ASEAN-6" countries, which consist of Singapore, Malaysia, the Philippines, Thailand, Vietnam, and Indonesia.

- The themes covered in this report are aligned with Singapore's Research, Innovation and Enterprise 2025 (RIE2025) plan, which highlights areas of strategic importance to Singapore.
- Verticals that overlap with multiple domains, namely Edtech, Agritech, and Green tech, have been analysed with custom methodologies to define a more specific list of companies to be classified under the respective vertical and domain definitions.
- · Deep tech is characterised by three properties.
 - 1. Possesses innovations/technologies
 - 2. Has strong scientific technological foundations
 - 3. Has proprietary research-based intellectual property (IP)





METHODOLOGY AND DEFINITIONS

- In this report, the deep tech and non-deep tech (general tech) datasets are managed according to PitchBook's de-duplication logic.
- Early-stage and late-stage deals are defined as follows:
 - The early stage consists of seed to Series B venture rounds.
 - The late stage consists of Series C and subsequent venture rounds.
- The top 10 global startup ecosystems are in accordance with Startup Genome's Global Startup Ecosystem Report 2024 and provides the following rankings:
 - 1. Silicon Valley
 - 2. London
 - 3. New York City
 - 4. Tel Aviv
 - 5. Los Angeles
 - 6. Boston
 - 7. Singapore
 - 8. Beijing
 - 9. Seoul
 - 10. Tokyo







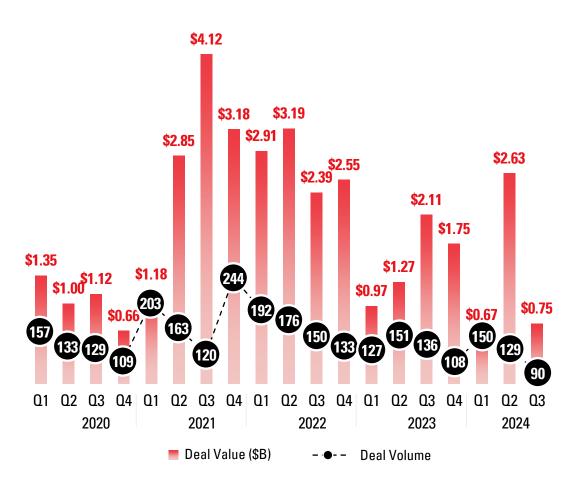
VENTURE CAPITAL MARKETS ACTIVITY

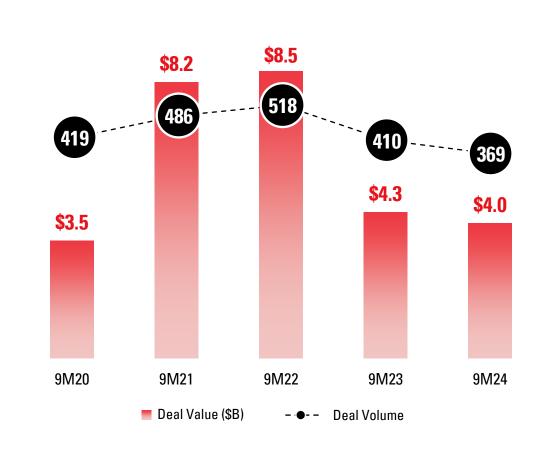




STARTUPS WEATHER A 2ND YEAR OF DEALMAKING DECLINES IN 9M 2024

VENTURE FUNDING DEAL VOLUME AND VALUE BY SINGAPORE-HQ FIRMS



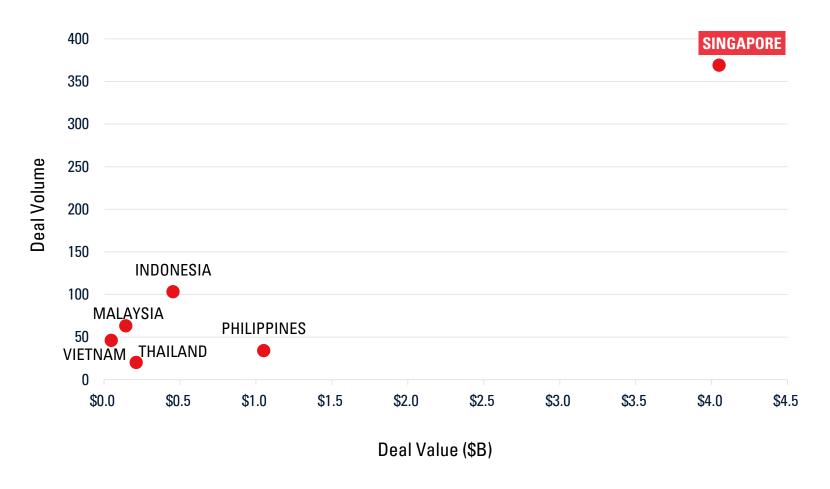






SINGAPORE LEADS IN ASEAN DEAL ACTIVITY

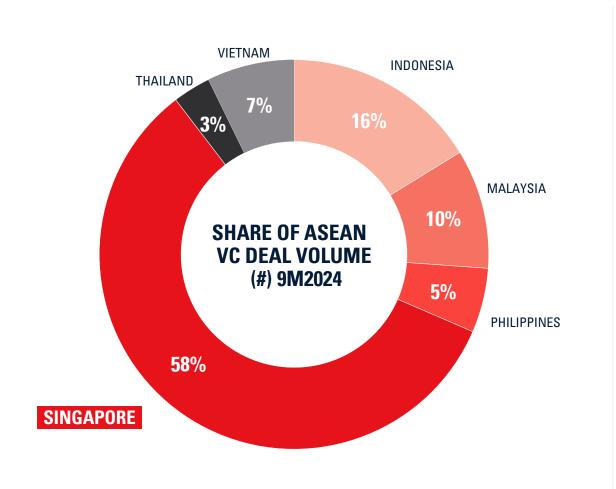
VENTURE FUNDING DEAL VOLUME AND VALUE PER MARKET IN 9M 2024

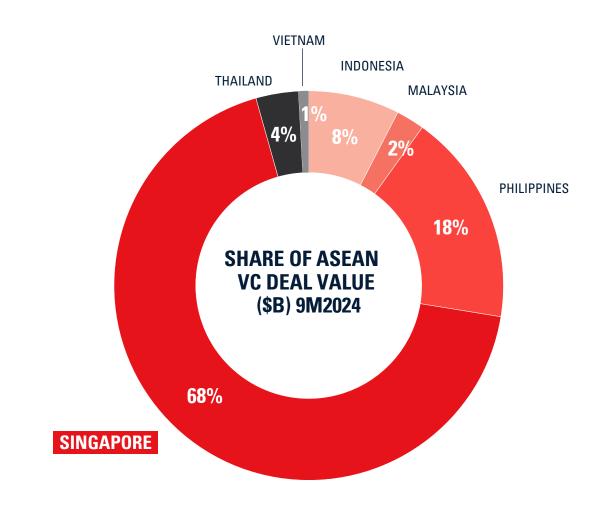






SINGAPORE VENTURE ACTIVITY STAYS AHEAD AMONG ASEAN



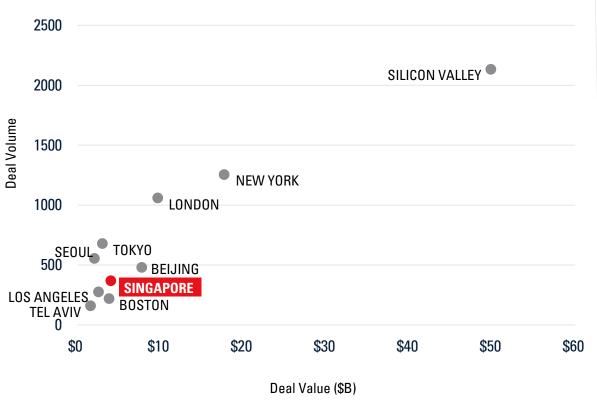






SINGAPORE AMONG TOP FIVE GLOBALLY

VENTURE FUNDING DEAL ACTIVITY BY TOP 10 GLOBAL STARTUP ECOSYSTEMS*



SHARE OF VENTURE FUNDING DEAL VALUE BY TOP 10 GLOBAL STARTUP ECOSYSTEMS* IN 9M24

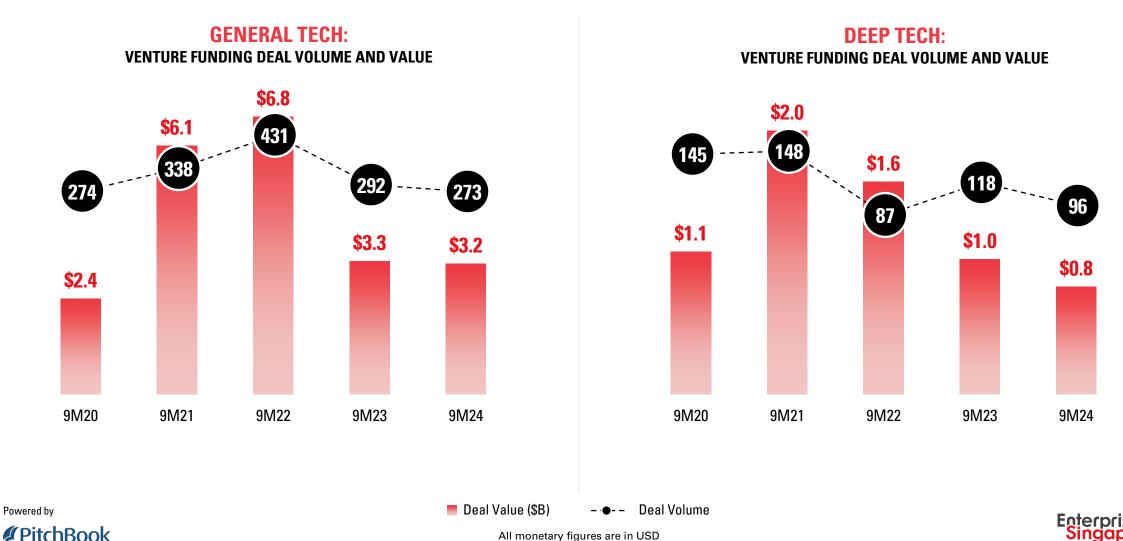






GENERAL AND DEEP TECH DEAL ACTIVITY DIPPED

Funding winter has deepened this year, resulting in an overall decline from previous years. Deep tech venture activity is on a steeper downward trend than general tech, reflecting the nature of the former's longer funding cycles.



FUNDING BY SINGAPORE THEMES





Funding by Singapore themes

SINGAPORE'S STRATEGIC DOMAINS

Singapore's journey to becoming an innovation hub began in 1991 when the government launched its first dedicated five-year plan—the National Technology Plan—to develop the city's science and technology capabilities. By 2010, it evolved into the current Research, Innovation and Enterprise (RIE) Plan – which enables the government to allocate funds into Singapore's leading innovative institutions and research & development (R&D) talent across four strategic domains to foster the development and commercialisation of frontier technologies.

Under the most recent plan, RIE2025, the government increased its budgeted amount to S\$28 billion, or 1% of the nation's gross domestic product, to support innovative enterprises and research, across four main domains. The plan is effective from 2021 to 2025 and will enable Singapore to foster frontier innovation capabilities and reinforce its position as one of the world's leading research-driven economies and startup hubs. State funding is particularly pertinent for enabling capital-intensive startups to overcome crucial but long gestation periods. The state's long-term strategising and concerted efforts to support R&D in

public and private sectors have resulted in multinationals anchoring those activities here and choosing Singapore as their base in Asia.

RIE2025 will continue to drive the progress of R&D in these four domains. Given the rapidly evolving global and technology landscape, RIE plans have also evolved to include funding for unanticipated needs and new opportunities. This has enabled Singapore to respond nimbly to new priorities, and to seed capabilities in critical, but nascent technological areas.







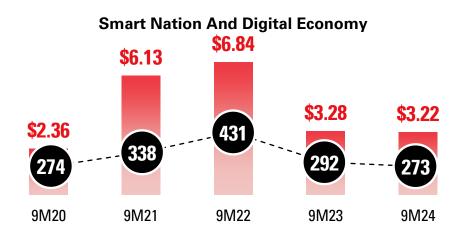


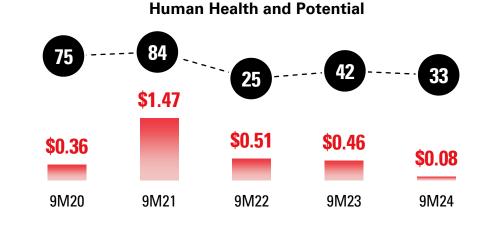




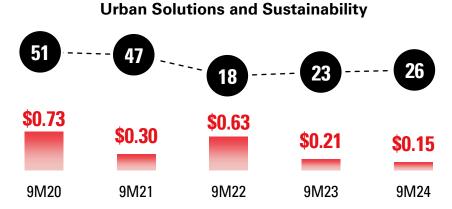
VENTURE FUNDING ACTIVITY VARIES ACROSS RIE DOMAINS

In line with global venture activity decline, 9M 2024 figures are mostly more muted relative to the heights of the previous year.





Manufacturing, Trade and Connectivity 44 ---- 53 19 ---- 17 \$0.26 \$0.51 \$0.37 \$0.60 \$0.01 9M20 9M21 9M22 9M23 9M24





Enterprise Singapore

SINGAPORE'S COMMITMENT TO INNOVATION, GROWTH AND DEEP TECH





SINGAPORE'S COMMITMENT TO INNOVATION, GROWTH AND DEEP TECH

Singapore government's efforts in developing its innovation ecosystem has been a long-standing commitment over the last few decades. This is done through targeted policies interventions, programmes and initiatives, as well as funding support. This has shaped the innovation and tech ecosystem that Singapore has today - over 4,500 tech startups, 500 VC firms, and over 220 accelerators. Apart from ecosystem development, the government continues to establish its niche in deep tech. This effort underscores Singapore's recognition of deep tech's potential for long-term value creation and its strategic importance to its startup and innovation ecosystem. This includes taking a holistic approach by, derisking co-investors, collaborating with partners for technical expertise, and ensuring access to quality talent.

Despite the current challenging fundraising landscape, the government remains steadfast in its commitment to enable deep tech startups to thrive. Given deep tech's long gestation, longer fundraising intervals are expected. In tandem, investors will also take a longer-term view of their deep tech investments. However, successful deep tech investments often yield clear differentiation and will

establish defensible moats.

As part of Singapore's deep tech strategy, the government will be allocating an additional S\$440 million to the Startup SG Equity scheme where it will co-invest with global and local VCs in Singapore-based deep tech startups to help them scale globally. This expands the total pool of government funding under the scheme to over S\$1 billion, so that Singapore will continue to grow its partnerships with global deep tech VCs, and deepen the ecosystem's technical expertise, commercial knowledge, and global network, especially in frontier areas such as biotech and quantum tech.

In addition, Singapore will expand its funding range from only early-stage startups to both early- and early growth-stage ones, via the merger of two government-backed investor arms, SEEDS Capital and EDBI, to form SG Growth Capital in 2025. This further enhances the country's support for tech startups across the various stages of growth. Singapore has also doubled down on working with local and global venture builders, with proven business models to bring impactful technologies from lab to market.

To further coalesce Singapore's startup community locally and connecting it to the world, the government would be launching Stage One, a multi-agency initiative jointly led by Enterprise Singapore and Economic Development Board in Q1 2025. Stage One is a one-stop platform that brings local and global startup communities together. It will support the startups' journeys – from setting up in Singapore, to building new capabilities and connections, and eventually to scaling from Singapore.

Overall, the Singapore government and their partners recognise the long-term benefits of deep tech investments, as these technologies will shape the future, offering strong business fundamentals and opportunities that can be captured.







INSIDER INSIGHTS







KAIXIN TAN
General Manager
SEEDS Capital

Mirroring global trends, investment activities in Singapore have remained muted as investors continue to exercise caution and are more selective. We observed that startups face extended fundraising timelines as investors opt for more comprehensive due diligence, emphasise path-to-profitability and seek favourable valuation targets in deal negotiations. This pullback in VC activity will likely stretch into early 2025 and could affect startups yet to deliver commercial expectations – signalling further market correction and consolidation going forward.

However, we anticipate overall investment activity in Singapore to start picking up as 2025 progresses, as the effects of declining US interest rates trickle down and fund managers, especially those who raised during the pandemic boom years, ramp up capital deployment. Our co-investment partners have also raised monies despite the funding winter, highlighting sustained interest in early-stage, innovative startups. These include Agfunder, which raised an

oversubscribed US\$102 million Fund IV¹ and UntroD announcing a successful first close of its Global Fund Il². An investment sentiment survey among our co-investment partners, showed about 80% are optimistic that the funding climate will improve in 2025. SEEDS Capital has also announced an additional S\$150 million to co-invest with both local and global fund managers and step up our pace of investments into deep tech³ in the next two years.

Recognising that deep tech startups generally require more capital, we increased our investment cap to S\$12 million, to better support startups in their early growth phase. For example, our recent follow-on investment into advanced manufacturing startup Meridian Innovations, alongside Taiwan Cooperative Venture, was part of a US\$12.5 million funding round⁴ to support its plans to scale globally and pursue projects with key blue-chip customers using its proprietary thermal sensors and imaging technology. We have also continued our support for Vivance (formerly known as

AWAK Technologies), investing alongside investors such as Vickers Ventures and Lion X Ventures in its US\$23 million Series B round⁵, to expand its portfolio of complementary solutions for home dialysis while also readying its flagship FDA Breakthrough Device designated ultraportable peritoneal dialysis (PD) device for a final pivotal trial in the US. As the world emerges from the funding winter and valuations get corrected in the region, we want to be well-positioned to double-down into our quality companies, allowing them to capture opportunities and compete effectively on the global stage.

We remain committed in our aspirations to strengthen Singapore as a top startup hub with a strong pool of globally competitive deep tech startups. Our portfolio companies VFlowTech and Transcelestial continue making notable progress in their respective domains, where the former recently announced the launch of India's largest long-duration energy storage manufacturing facility⁶ while the latter deployed the first-

ever laser communication-enabled 5G rollout for enhanced event connectivity in partnership with T-Mobile in US⁷.

Overall, Singapore remains an attractive destination to access novel Intellectual Properties (IPs), spin-off into commercially viable startups and to testbed solutions before scaling into markets. There is also still available dry powder in the region, as characterised by a growing pool of global VCs setting up offices in Singapore. Lastly, Singapore's robust talent pool with good scientific and management skills is only growing stronger as we continue building a base of quality ventures. Our continued competitiveness is validated by recent entrants Breakthrough Energy⁸, MPM Bioimpact⁹ and Flagship Pioneering¹⁰, all of which have opted to anchor their regional hubs in Singapore. Going into 2025, we remain optimistic on the prospects of earlystage deep tech and expect deal velocity to pick up in Singapore.





^[1] AgFunder VC Closes Fourth Early-Stage Fund at \$102 Million (igrownews.com)

^[2] Real Tech Holdings has been rebranded as UntroD Capital, establishes its 2nd Global Deep Tech Fund and welcomes new investors with the 1st closing | UntroD

^[3] enterprisesg.gov.sg/resources/media-centre/speeches/2024/september/opening-address-by-ms-cindy-khoo-chairman-seeds-capital-at-seeds-connect-altro-zafferano

^[4] https://www.prnewswire.com/in/news-releases/meridian-innovation-secures-us12-5-million-in-funding-from-strategic-partner-existing-investors-and-new-investors-to-accelerate-growth-302268816.html

^[5] https://www.businesstimes.com.sg/startups-tech/startups/medtech-startup-awak-technologies-raises-more-us20-million-series-b-funding

^[6] https://vflowtech.com/2024/06/26/vflowtech-launches-indias-largest-long-duration-energy-storage-manufacturing-facility/

^[7] https://transcelestial.com/blog/transcelestial-deployed-the-first-ever-lasers-to-power-5g-for-coachella-concertgoers/

^[8] Breakthrough Energy, Temasek and Enterprise Singapore jointly establish "Breakthrough Energy Fellows - Southeast Asia", a multi-year effort to accelerate the development of early-stage climate-tech solutions in the region - Temasek

^[9] https://www.linkedin.com/posts/astarsg_biotech-deeptechventurebuilding-startupjourney-activity-7222153982918451200-cnYA?utm_source=share&utm_medium=member_desktop

^[10] A*STAR and Flagship Pioneering Announce Partnership to Spur Biotech Innovation in Singapore (prnewswire.com)



PHIL INAGAKI
CIO & Managing Partner
Xora Innovation

The true measure of success in deep tech investment goes beyond the volume of deals; it lies in the quality of these investments, the long-term impact they generate, and their ability to create global value in solving the world's most pressing challenges.

Building deep tech ventures is no mean feat no matter where you are. This is especially so for Singapore with a small market and in a world abundant with large countries with muscular industrial policies. However, as a deep tech venture investor and builder, we are starting to see early promising signs for Singapore in attracting global deep tech talent, capital, and networks.

First, we are seeing growing interest from global investors in quality deep tech startups. For example, in our portfolio, Amperesand and Cosmos Innovation are both truly homegrown. Amperesand secured \$12.5 million in its seed round, attracting top international investors such as Material Impact, TDK Ventures, and Foothill Ventures. Cosmos has also gained significant backing from renowned investors such as Innovation Endeavors and Two Sigma Ventures, as well as influential figures like Demis Hassabis, the CEO of DeepMind, and MIT professor Tomaso Poggio.

Second, the Singapore deep tech ecosystem is highly interconnected, with strong collaborations between academia, industry, and government. For deep tech ventures to succeed, we must extend this network to international markets, industries, and talent. This is foremost in our minds at Xora; our startups must have the right global connections from inception, in ambition, talent, and market.

Third, it is also encouraging to observe that global deep tech funds are not just investing remotely—many are seeking to establish a physical presence in Singapore. I believe the expertise and capabilities that global investors and venture builders bring will accelerate local efforts in building and scaling deep tech ventures.

Looking ahead, it is important that we convert this momentum into focused efforts on outlier companies that have the potential to generate large, growing, and sustainable profits while not getting lost in the hype of alluring science. It is an arduous task but necessary for Singapore's advanced stage of development. If we succeed, as a bonus, we get to solve big problems at a global scale.





JIXUN F00 Senior Managing Partner Granite Asia

As a long-time investor in Asia, I've witnessed the region's remarkable evolution firsthand. Granite Asia, originally founded as Granite Global Ventures (GGV), emerged from a Singapore-government-led initiative to foster an innovation-driven economy. Over the past two decades, we have deepened our commitment to the region and positioned ourselves as a pan-Asian investment partner.

Despite a slowdown in venture capital funding, Southeast Asia presents significant opportunities. It requires the region to continue to attract top-tier talent, combined with ongoing supply chain realignments, thereby positioning the region for sustained growth.

Singapore is particularly well positioned, thanks to its proactive support of

innovation through various programmes. Initiatives like the ONE Pass and Tech.Pass, which aim to attract global tech talent to Singapore, and Enterprise Singapore's Startup SG programme, which provides funding and mentorship to early-stage companies, play a crucial role in bolstering the ecosystem. Additionally, the Singapore Economic Development Board has been instrumental in developing R&D partnerships and offering incentives for green investments, supporting the shift towards sustainability and energy transition. These efforts create a vibrant environment for innovation, making Singapore a hub for new opportunities in the region.

Our investment strategy reflects the urgent challenges facing the region. Addressing climate change, advancing energy transitions, and building resilient food systems are critical areas where we see both needs and opportunities. Emerging technologies like Al and robotics offer additional potential to drive productivity and innovation, making them key focus areas in our portfolio. The changing financial landscape requires a thoughtful approach to nurturing entrepreneurs. The era of abundant, lowcost capital is over, necessitating a return to fundamental business building. We believe in providing an array of tailored financial tools, such as private credit, to help companies scale sustainably in this new environment.

Granite Asia remains committed to
Southeast Asia's bright future,
collaborating with founders,
governments, and the broader
community to unlock the region's vast
potential. Our commitment to the region
underscores our belief in the promise of
Southeast Asia and the broader rise of
Asia. With the right support, this region
has the potential to emerge as a global
leader, and we are excited to play a role in
making that vision a reality.



ROB JESUDASON
CEO & Partner
Serendipity Capital

The venture capital funding market in Singapore has moderated relative to the levels reached during 2021 and 2022 but remains robust in the context of the preceding five- and 10-year periods. Pleasingly, Singapore has remained an attractive destination for investing in deep tech. We believe we are heading into an exciting stage, with recent developments and initiatives establishing a renewed focus on companies that leverage Singapore's strengths in advanced technology and innovation.

Recently announced national policies in areas like artificial intelligence (NAIS 2.0) and quantum technologies (the National Quantum Strategy, or NQS) have set a clear ambition and direction for the leading role that Singapore-based companies and startups should play. Similarly, the deep tech-focused pilot programme announced last year between Xora Innovation, National University of

Singapore (NUS), and Nanyang Technological University (NTU) is a strong step forward to unlocking the value of the knowledge and intellectual property residing within Singapore's world-class universities and research institutions.

A good example of how these initiatives will support the startup ecosystem is the recent announcement of the partnership between the National Quantum Office (NQO), A*STAR, NUS, National Supercomputing Centre (NSCC), and Quantinuum, a leading quantum computing player and a Serendipity Capital portfolio company. Quantinuum will open an R&D facility, and the partnership will provide Singapore-based enterprises, businesses, and researchers with access to leading quantum computing hardware. Singapore is one of only a handful of nations able to offer such capability.

Despite these developments, one of the key challenges that persists is the attraction and retention of top-tier talent. The global competition for skilled workers is intensifying. Singapore must continue its efforts to cultivate local talent while also maintaining an environment that attracts international experts. Addressing this talent gap is crucial for sustaining Singapore's position as a leading hub for technological advancement.

At Serendipity Capital, we remain focused on identifying and supporting founders and businesses that demonstrate genuine technological innovation coupled with strong pathways to commercialisation. These characteristics are critical for developing companies that become meaningful not just in a Singapore-based context, but with global relevance.







CYRIL EBERSWEILER
General Partner
SOSV

Without a doubt, Singapore continues to be a major startup hub with steady VC investment. While there has been a slight cooling compared to the peak years of 2021-2022, this mirrors global trends. In deep tech, every actor on the island is clearly fostering the ecosystem, particularly in artificial intelligence, quantum computing, and biotechnology. There are too many actors and initiatives to list here, as it's truly a concerted effort by the government, universities, foundations, VCs, and others. Everyone is aware of programmes like GRIP, the Singapore Climate Ventures Program, and the Amplifier Programme from Temasek Trust, but there are dozens of other initiatives worth noting.

Setting aside the broader investment sentiment, the challenges this year are likely similar to those of last year: increased competition for talent in the tech sector-good news for new graduates—and a lack of liquidity in the system, which affects the local ecosystem as it does elsewhere. The sluggish pace of M&As and IPOs is not unique to any ecosystem at the moment, but it remains a significant challenge for local startups. That said, efforts are underway to address these issues, including promoting partnerships with corporations, many of which have a strong presence in Singapore, and encouraging companies to list on SGX.

Investing in deep tech is a long-term play, with outcomes unfolding over several years. With a growing emphasis on sustainability, we can expect to see more cross-border collaborations and investments within Southeast Asia and beyond, as solutions developed here can be applied globally. We will likely witness an increase in corporate innovation programmes and CVC activities, resulting in a stronger focus on exits for the most mature startups.

Since we invest at the earliest stages of the journey, we are always on the lookout for the brightest entrepreneurs, regardless of the market cycle. The venture downturn is challenging, but we expect companies to be more resilient than ever—after all, the best companies often emerge from downturns like this.





ANDY HWANG General Partner Wavemaker Partners

There's still a sense of pessimism in the market, with the current liquidity crunch making it tougher for many startups to raise their next funding rounds. Investors have shifted towards quality investments, focusing more on sustainable growth and strong unit economics.

Regarding deep tech funding, the industry has made good progress, though it hasn't always been easy. In the early days, we had to bear the brunt of finding other VCs to invest alongside us in deep tech companies. This is why we're always grateful to the Singapore government for co-investing with us in deep innovation opportunities, from NRF in our first fund to SEEDS Capital in the subsequent ones. We still lack meaningful Series A funding for deep tech, so we often have to look outside the region to raise the next rounds of funding. Over time, Singapore has become a deep tech hub for the region.

We've started the positive cycle by providing meaningful startup grants and funding while making it easy to do business here. The government's investment in innovation has been crucial, but we need to continue the effort over time. There are other things that we could also do, such as being more intentional in working on the innovation lying within our university labs and encouraging corporates to adopt new solutions.

While many may be hesitant to invest now, we're still actively seeking founders who are solving real, compelling problems in Southeast Asia. The region faces numerous challenges, and we believe early-stage venture capital will always have a role in helping address them.

Conversely, when markets were booming and capital was easier to access, we had to stay disciplined and make rational investments. Over time, we've worked with our founders on setting more rigorous milestones to ensure that the value they create is undeniable to future investors—an approach that has benefitted our portfolio companies in today's cautious environment.





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Data assurance and integrity

Considering the opaque nature of private markets, we strive to constantly update our data to ensure accuracy and comprehensiveness. As such, figures will vary slightly upon a data refresh to reflect PitchBook's continual effort to improve the breadth of our data and align our methodologies more closely to an ever-changing financial landscape. For data requests, please reach out to pr@pitchbook.com.







