

ENTERPRISE sparks

JUL - SEP 2022 >> ISSUE #34



InnovFest 2022

The start-up ecosystem reuniting in-person after two years of largely virtual events

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WHAT THE BEST MENTORS DO - They train great leaders

Our mentors train their mentees to become successful entrepreneurs and leaders, and in turn, our mentees teach our mentors so much more.

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IT TAKES A COMMUNITY TO Raise a Start-Up

Perspectives from our NUS Enterprise start-ups on how various members from the ecosystem contributed to their unique journeys.

Photo was taken according to prevailing COVID regulations.

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red hot

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DEPUTY PRESIDENT'S Message

My heartiest greetings to all our readers! It has been an exciting quarter for NUS Enterprise with numerous in-person activities resuming in our community with the easing of safe management measures. In June, we held our annual InnovFest conference (p5-8), part of the ATxSG event, which saw over 26,000 physical and virtual attendees. We had some 100 start-ups across our NUS Enterprise ecosystem exhibiting at the conference. It was wonderful to witness the gathering of various innovators, entrepreneurs, venture capitalists and more from the start-up ecosystem. Participants had many new and meaningful conversations during the three days, taking advantage of the first time in three years that our community was allowed to gather on such a large scale. Our start-ups from BLOCK71 in Indonesia and Vietnam specially flew in to Singapore to be part of InnovFest and valued connecting with one another (p9-10).

Besides InnovFest, we welcomed a new batch of start-ups from the NUS Enterprise Booster Programme, which leveraged a combination of the strengths, community and networks of both THE HANGAR and BLOCK71 (p7). While the programme started off mostly virtually, the start-ups were able to gather together in-person by the end of the programme during Community Day. I look forward to seeing what they will accomplish as they embark on their ventures.

Our Sparks team also took the opportunity to catch-up with some of the start-ups from our various programmes and initiatives. Waffle Technologies, which was founded by our NOC alumni, shared about their experience starting-up during the pandemic and the opportunities to grow with the F&B industry as it bounces back from the pandemic (p11). Vilota talked about their start-up journey and how they were positively impacted by experienced mentors and exposure to opportunities through programmes

such as GRIP and PIER71, which allowed them to tap onto networks that were otherwise not possible (p18). Synectify's founder also shared about his previous experiences in the start-up ecosystem, and how he was inspired by the various people he met along the way, as well as NUS' support through THE HANGAR, GRIP and BLOCK71, leading to where Synectify is today (p19). Waffle Technologies, Vilota, and Synectify had meaningful advice for aspiring entrepreneurs – to seek our experienced mentors, join a community, programme, or accelerator to help grow the business, and to also learn to see opportunities despite setbacks.

Continuing with the theme of community and mentorship, it is always encouraging to hear about mentors inspiring mentees, and how the mentees go on to make an impact in society. One of our mentors, Joe Rouse, and his former mentee Esther Wang, founder of Joytingle and a Philip Yeo Initiative (PYI) Associate, shared about various aspects of growth for them through the years. For Joe, he delved into the growth of his journey as an experienced professional and mentor to various entrepreneurs. For Esther, the foundation of receiving mentorship from PYI and building the growth of founders with hearts to help the community also inspired her to grow beyond being a start-up founder- to learn leadership, how to build a positive culture, and practice reverse mentorship (p12-13).

I hope that you will enjoy this edition of 'Enterprise Sparks'. May you be inspired and motivated by the entrepreneurial spirit of our founders in these pages.



Professor Freddy Boey

Deputy President
(Innovation & Enterprise)
National University
of Singapore (NUS)



red hot



6 WEEKS TO ACCELERATE YOUR NUS Enterprise Booster Programme and Community Day

This year, we were excited for our latest cohort of the NUS Enterprise Booster Programme, which was held hand in hand with THE HANGAR and BLOCK71 from 21 February to 28 April 2022. The following start-ups - Bonfire Health, Emerge Sport, FloatingOn, GO!MAMA, Hummus Education Pte. Ltd, JoyfulPerson, KatoKato, #MeetArt, Micelah, Nextblock, Ooda, Scent Journey and Vfluencer, were on board with us for the six-weeks acceleration programme to take their journey to the next step.



The NUS Enterprise Booster Programme is an intensive six-week programme designed to help start-ups to accelerate their growth as part of the NUS Enterprise ecosystem. Start-ups are connected with potential partners within the ecosystem – corporates, investors, and mentors – to validate and explore go-to-market strategies before launching products. The specially curated curriculum takes each week to focus on a topic relevant to their start-up journey - Innovation Frameworks, Scaling, Fundraising and Pitching – to further develop and boost the start-up's product-market fit with the guidance of mentors and partners from distinguished organisations.

During the first leg of the programme, Kris Childress, advisor, and Mentor-in-Residence at NUS Enterprise, shared about storytelling and creating a resonating narration for the start-up's business, company, products, and ideas. We were also joined by Natasha Foong, an entrepreneur and investor with over twenty-five years of Venture Capital (VC) investment experience, to highlight insights from a VC's point of view. Our cohort was geared up for more training.

The programme continued with exciting workshops. Hugh Mason, Adjunct Associate Professor at NUS and entrepreneur with 30 years of success leading ventures, shared his insights on navigating the right direction for start-ups and strategies for scaling up businesses. During the Masterclass, Derianto Kusuma, former Co-founder & CTO of Traveloka, discussed building a high-performance technology organisation through the role of tech, bringing in talents and shaping organisational cultures to enhance the effectiveness of companies.

By mid-programme, the cohort gained more skillsets in negotiation and understanding investors and their go-to-market strategies. Greg Blackwood, our Investment and Grant Committee Member at the NUS, with rich experience as an entrepreneur, investor, and mentor to help us get the hang of negotiation. Paul Choo, an investment committee member with over 20 years of experience in the fund investment industry, shared how to fundraise with different investors on our investment journey. It was delightful to have Ongki Kurniawan, Head of

Indonesia, Stripe, at our workshop to discuss strategies for venturing into the market.

Later on, Kris Childress was back to share the fruits of pitching and prepare our cohort for their final pitch. Vinnie Lauria, Managing Partner at Golden Gate Ventures, also shared about the matrixes for start-ups on scaling and tracking progress. Our cohort got a clearer idea of how an effective investor pitch works and the key to start-up matrixes and are ready to take off for the final demo day!

At the end of the intensive six-week programme came Community Day, where all start-ups had the opportunity to showcase their products and solutions. This day was particularly special for this cohort of entrepreneurs as they introduced their refined products and solutions to their cohort-mates and mentors through hybrid event, allowing them to finally meet in-person. The event concluded with putting up their logo plaques on the BLOCK71 logo wall, completing their inauguration. It was a day of celebration, and we wish them success as they embark on their businesses.



INNOVFEST 2022: EXCITING TRENDS IN THE REGION'S INNOVATION AND ENTERPRISE ECOSYSTEM



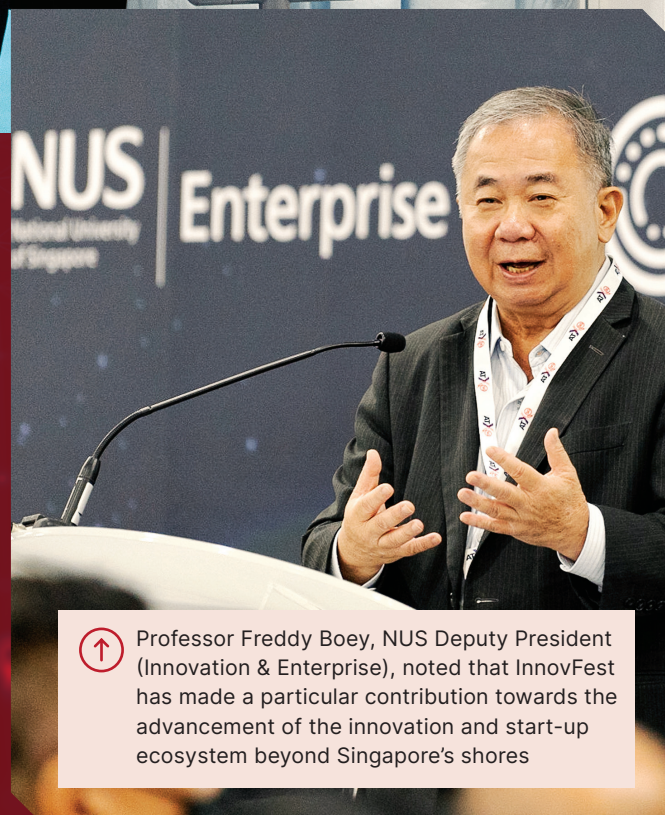
InnovFest x Elevating Founders 2022 returned in a big way since its last in-person event two years ago, bringing together exciting innovative ideas and key players around the globe to Asia's leading innovation conference. Organised by NUS Enterprise in partnership with Informa Tech, the conference is the official start-up event of Asia Tech x Singapore (ATxSG).

"InnovFest is part of NUS' efforts to connect the innovation value chain and build up the ecosystem in Asia...Not only are we helping to foster new partnerships and uncover emerging trends, but more importantly, we hope to act as a conduit for attendees to make powerful connections at the event," said Professor Freddy Boey, NUS Deputy President (Innovation & Enterprise) in his welcome address.

Prof Boey also highlighted how entrepreneurs need to adapt to the changing and uncertain landscape. "Organisations need to innovate rapidly to respond to changing times and capture opportunities that may arise. Speed in adopting and exploiting new technologies will be critical for success and survival. The ability to take new technologies out of the lab and launch new products and services at start-up speed will set winners apart from the losers."



Conducted in a hybrid format from 1 to 3 June 2022, InnovFest x Elevating Founders showcased some 100 start-ups, spin-offs and technologies from NUS' entrepreneurial ecosystem



Professor Freddy Boey, NUS Deputy President (Innovation & Enterprise), noted that InnovFest has made a particular contribution towards the advancement of the innovation and start-up ecosystem beyond Singapore's shores



↑ Ms Rahayu Mahzam, Parliamentary Secretary in the Ministry of Communications and Information, and Ministry of Health, gave the keynote address at the opening of InnovFest x Elevating Founders.



↑ A lively scene at the exhibition stage which consisted of some 100 start-ups from the NUS ecosystem.



↑ NUS Enterprise is excited to support start-ups who are rejuvenating retailers located within SMRT through the NUS Technology Access Programme (TAP).



↑ A full house at the in-person sessions, which covered topics in Web3, Sustainability and Accessing markets in Asia.



Ms Mahzam (centre) and NUS President Professor Tan Eng Chye (second from right) were introduced to the technologies of several NUS start-ups exhibiting at the event, including Aleph Technologies, Green Cop, Cyfirma, Exoskeleton Technologies, and Singrow

THE NEW DIGITAL FUTURE

Keynote speaker, Ms Rahayu Mahzam, Parliamentary Secretary in the Ministry of Communications and Information, and Ministry of Health, resonated with the theme of redefining tech for a better future. She affirmed that many of the innovations developed by entrepreneurs in Singapore have the potential to be part of a technology sea change.

"The rise of Web 3.0, the Metaverse, and other developments offer new opportunities for solutions that improve efficiency, reimagine possibilities for services and reshape the digital world as we know it – and start-ups will lead the way in this future," she said.

Ms Mahzam also spurred the audience to not leave the rest of

society behind as we forge ahead, and come together as a community to drive programmes and projects that meet the digital needs and challenges of all segments of the community, especially the vulnerable. She also hoped that more women would participate fully in Singapore's digital future.

FIRST CORPORATE PARTNERSHIP WITH STELLAR LIFESTYLE



During the conference, NUS Enterprise cemented a corporate partnership with Stellar Lifestyle, a business arm of SMRT Corporation Ltd, kickstarting its innovation programme aimed at supporting and rejuvenating retailers located within SMRT-operated train stations. This partnership will identify and support high-potential start-ups from NUS Enterprise's entrepreneurial eco-system with innovative technologies and solutions.

"We look forward to working with start-ups that can support our retailers and commuters, helping them become more resilient in the face of an uncertain business environment, by improving their operational effectiveness, uplifting their technical capabilities and technology awareness, and providing new experiences that our commuters can enjoy," said Mr Tony Heng, President, Stellar Lifestyle.



From left: Prof Yue Chee Yoon, Director, NUS Enterprise Academy; Mr Brian Koh, Director, Ecosystem Development, NUS Enterprise; Prof Freddy Boey, Deputy President (Innovation & Enterprise), NUS; Mr Tony Heng, President, Stellar Lifestyle; Mr Seah Moon Ming, Chairman, SMRT Corporation Ltd; Mr Abu Bakar Mohd Nor, Board Member, SMRT Corporation Ltd

Central to this partnership is the NUS Technology Access Programme (TAP). "Through TAP, corporates can shortlist the best solutions and work closely with teams to refine their solutions according to their business needs. Simultaneously, start-ups in our ecosystem will have the opportunity to pilot their solutions that address real-world problems and collaborate with a corporate partner to bring them to market," shared Prof Boey.



ANIMATED DISCUSSIONS, FRESH INSIGHTS

Participants also heard first-hand from thought leaders on the latest industry trends:



How can we do better with the metaverse?



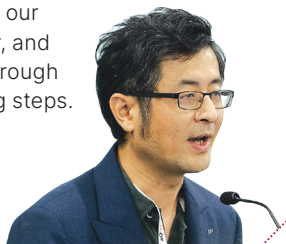
The metaverse is tipped to be the next generation of the Internet. With every wave, there has been a change of winners and losers. As it becomes more mainstream, the metaverse will be taken to new levels, just like how smartphones and the Internet have become pervasive.

Start-ups and new companies can also be positioned to win in this one-in-a-trillion opportunity, as emphasised by NUS Computing's Associate Professor Keith Carter, who is also Director of NUS FinTech Lab, at a panel session. Companies can leverage on opportunities to be content producers. One example, he said, is how fashion behemoths like Gucci are experimenting with Roblox to introduce high fashion to a younger generation, so that they will remember these brands as they grow up.

How can technology change our work-life balance?

Seamless, just-in-time and intelligent computing support for our daily activities – this, described by keynote speaker and NUS Department of Computer Science's Associate Professor Zhao Shengdong, is Head-Up Computing, a new paradigm that integrates everyday interactions between humans and computers more holistically and seamlessly.

Through continual design and amelioration, Heads-up Computing combines the latest technologies such as wearable computing, sensors, voice-based multimodal I/O, data analysis and prediction, and distributed networking. These technologies help reduce our cognitive load by offering us in-time assistance. For example, if we want to cook a meal, the wearable hardware can help tailor a recipe, list out ingredients based on what is available in our refrigerator, and guide us through the cooking steps.



How is sustainability tied with ESG (Environment, Social, and Governance)?



Prof. Lawrence Loh, Director of the Centre for Governance and Sustainability at NUS highlighted that sustainability is closely tied with ESG (Environment, Social, and Governance). According to Prof. Loh, "The E and S, cannot just happen without the G laying the ground."

While topics on sustainability and ESG are often mentioned when we move forward in innovation, Prof. Loh stressed that there is a need for us to start with something even more fundamental when it comes to sustainability.

Will we still have chicken in our chicken rice months from now?



Food resilience is a pressing problem and a national priority for Singapore, especially in view of the pandemic and ongoing geopolitics. To support "30 by 30" – the nation's nutritional goal of producing 30 per cent of the population's nutritional needs by 2030 – innovative agriculture technologies and businesses in the region will no doubt come into play.

Ms Melin Lim, Senior Director of the Urban Food Solutions Division at the Singapore Food Agency, highlighted that ensuring quantity is just one



aspect of the equation. It is important, she reflected, to see what the other underlying issues are, and to build food resilience through resolving climate change issues.

Associate Professor Chew Fook Tim, Vice Dean (Undergraduate Studies) at the NUS Faculty of Science, shared insights on how technological innovation can address agricultural deep-tech and security goals.

Offering an agritech start-up perspective, Dr Tan Wee Kee, Co-Founder and CEO of NuSoil, noted that agritech can go beyond the Singapore market. "Considering the product market of start-ups and looking into resolving pragmatic issues in Singapore, there is potential to export out the technology in the future too", said Ms Tan.

INNOVFEST: IN FIGURES

>26,000
physical and
virtual attendees



27
curated sessions at InnovFest, with
start-up founders and thought leaders
sharing their experience and expertise



76
speakers, panelists, and
entrepreneurs across
the three days



~100
start-ups, spin-offs and
technologies from the NUS
ecosystem featured



BLOCK71 START-UPS FROM INDONESIA AND VIETNAM VISIT SINGAPORE

Our BLOCK71 start-ups from Indonesia and Vietnam had the opportunity to visit the NUS Enterprise start-up ecosystem during their visit to Singapore. Check out the fun they had exploring our various spaces and meeting new people at InnovFest x Elevating Founders - Till next time!



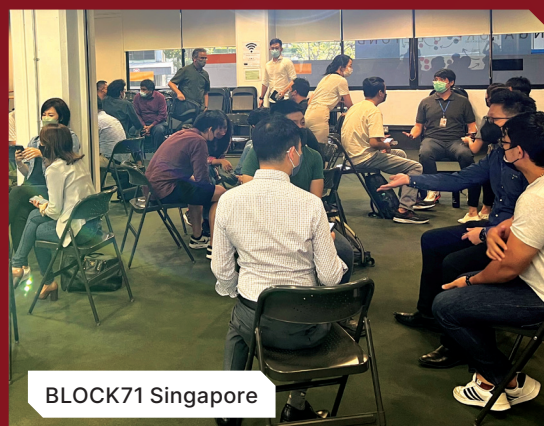
NUS Agritech Centre



NUS Enterprise@Singapore Science Park



NUS Enterprise@Singapore Science Park



BLOCK71 Singapore



PIER71™



ICE71



red hot



AirCity (BLOCK71 Saigon) was excited to make new friendships within the ecosystem



Bell Society (BLOCK71 Bandung) posing with NUS Provost, Professor Ho Teck Hua



Sandiaga Uno, Minister of Tourism and Creative Economy of the Republic of Indonesia, shows his support for Indonesia startups participating at InnovFest. He is hosted by Hui Kwok Leong, Acting Director of Ecosystem Development at NUS Enterprise.



Exploring Singapore's vibrant night life and dining culture after a week of talking business



Sebastian Alex Dharmawangsa from Gerakan Nasional 1000 Startup Digital posing with Kevin Putra Wangsa, CEO of Universitas123 (BLOCK71 Jakarta)



The delegation of start-ups from BLOCK71 in Indonesia and Vietnam were led by community managers from BLOCK71 Bandung, Jakarta, Yogyakarta, Saigon

There are a 'Waffle' lot of ways to grow

Auston Quek and Zames Chua first started Waffle Technologies after graduating from NUS, at the peak of the pandemic. The start-up, which has its roots in the NUS Overseas Colleges (NOC) programme, provides point-of-sale services to physical food and beverage outlets, allowing businesses to streamline their operations, update their menu, view data insights, all while integrating it into their customer loyalty programmes.

Starting out during the pandemic, the young entrepreneurs found their start-up niche in the food and beverage industry amidst the tough time for the industry. Auston remarked "It is during these trying times that our local businesses explore new and more efficient ways of doing things, and post-pandemic - we see a new way of doing business, one that is more customer-centric and data-driven. We wanted to make sure we can be in the punch of it and that we can help our local businesses reopen and thrive post-pandemic."

Currently, well-known brands like Barcook Bakery, Lee Wee and Brothers, Kopifellas and more are using Waffle Technologies to deliver the best customer experience – an amazing feat for the young founders!

During the recent InnovFest x Elevating Founders 3-day conference, Waffle Technologies had the opportunity to be one of some 100 NUS Enterprise affiliated start-

ups exhibiting at the event. Being a relatively new company, this was also the first time that they were part of such a large-scale event, having previously spent most of their early days doing validation over Zoom. "It was a great chance for our team to have the opportunity to meet people. Opportunities also present themselves here - we met people who might become customers also, for example, people want to be helpful to us on partnerships and so on. Furthermore, the team bonded very well and everybody was able to come down and learn together," said Auston.

As travel restrictions in Singapore had also eased up, many international participants attended InnovFest, and this was observed by the team. "I even have people who are coming from Indonesia, Vietnam, Philippines, and so on. They came over to our booth and gave us the international perspective on having seen this somewhere in the Philippines or Indonesia before and they would show us how they are doing things that we could incorporate into our



Source: wafflepos.com

product," said Auston.

Besides exhibiting, the team also took the opportunity to meet entrepreneurs and see what they are doing in Asia. Bringing the ecosystem together brought about many conversations and the new perspectives were certainly very helpful for them to explore new ways to develop Waffle Technologies.

As safe management measures ease up, Auston looks forward to opening up and growing together. "We look forward to opening up with the industry, and of course, expansion is the next step that we are looking towards. We have spent one year in across 100 locations in Singapore, and throughout this time, NUS has been super helpful in our journey," shared Auston.

The NUS Overseas Colleges (NOC) programme is all about providing you with the entrepreneurial experience that you need to start-up your journey, just like how it did for Auston and Zames. Gain access to fifteen entrepreneurial hotspots, take the role of the entrepreneur at innovative start-ups, and be mentored by serial entrepreneurs, investors and coaches in top ecosystems.



Find out more

What the best mentors do – they develop great leaders

PERSPECTIVES OF HOW OUR MENTOR AND MENTEE INSPIRE EACH OTHER AND GROW BEYOND THEMSELVES



GROWTH BEYOND A START-UP FOUNDER

ESTHER WANG
Founder of Joytingle



GROWTH BEYOND A START-UP

The daily grind to attain product-market fit meant founders will (rightfully) focus on the survival of their start-up first. With the limited time available, having mentors like Joe Rouse was tremendously helpful as a sounding board since he was drawing upon his past experience as a pharmaceutical sales professional, and his ability to connect me with another founder who was running a start-up in the same industry.

INFORMED BY MY CHRISTIAN FAITH, THERE ARE THREE KEY AREAS IN MY GROWTH AS A LEADER.

PEERS

Fellow founders and other recovering entrepreneurs

As 'iron sharpens iron, so one man sharpens another. Proverbs 27:17'

Learning from my peers helped me multiply my understanding and split the risk by doing things together.

01

PARENTS, ANGEL INVESTORS, MENTORS

People who are wiser and invested in my growth as a person. These mentors pour into my life from their collective wisdom.

"Where there is no counsel, the people fall. But in the multitude of counselors, there is safety." Proverbs 11:14

"Plans fail for lack of counsel, but with many advisers, they succeed." Proverbs 15:22

02

03

MENTEES

People whom I came across, and specifically reached out for my advice on a regular basis.

It does not necessarily mean a younger person, I once had a 40-year old petrol station owner whom asked me specifically to be her mentor.

Through my time as a mentor, the mentees' responses gave me an insight into how I might have come across to my mentors.

Using the metaphor of my life as a cup of water - my mentors pour into my life. And out of the overflow, I am able to give to my peers and my community. The mentees are a blessing because with them, I am able to give back. With these 3 areas (mentors, peers and mentees) my cup will be a flowing stream of water instead of staying stagnant. Therefore, mentorship can be bi-directional.



GROWTH AS A MENTOR WHILE NURTURING ENTREPRENEURIAL TALENTS



JOE ROUSE

Former NUS Enterprise Mentor in Residence;
Advisor, New Zealand Trade & Enterprise
Beachheads

I came to Singapore in 2009 to join NUS Enterprise as a mentor to companies formed by NUS students. Prior to that, I had worked in tech start-ups in Canada that were successful in the US market, and later founded venture capital funds in Canada then New Zealand. But my own entrepreneurial journey began at age 12, when I delivered newspapers, cut lawns, and shoveled snow in my hometown of Montreal. The NUS mentoring programme was still in development in 2009. Since then, NUS Enterprise's mentoring space expanded from the black and whites up on Prince George's Park, to the I3 building (THE HANGAR) and then BLOCK71. I also got involved with the NUS Overseas Colleges (NOC) programme, some of the corporate innovation programmes at BLOCK71 and Lean Launch Pad, which later led to NUS Graduate Research Innovation Programme (GRIP). During this time, I also co-founded a venture fund, Get2Volume Accelerator Fund, with one American and one Singaporean partner. We were part of the same National Research Foundation (NRF) cohort as Jungle Ventures and Golden Gate Ventures, but our focus was on what became known as 'Deep Tech' - hardware-related B2B solutions. Through Prof. Wong Poh Kam, who was then the former director of NUS Entrepreneurship Centre (NEC) and NOC, I was also part of the BANSEA board for a time.

I recall that I was paired with Esther via NUS Enterprise in late 2014. She was an emerging leader in the ecosystem, as I saw through her 'Esther Speaks' YouTube channel. We saw an opportunity to work together as mentor-mentee, as we had some common ground in terms of approach and outcomes. We agreed to meet up on a regular basis to discuss Joytingle's progress as well as her own: Value proposition, market opportunity and go to market strategies and plans, and team. This almost always took place at THE HANGAR in I3, where Joytingle was based.

My mentoring approach at NUS has been based on first putting myself in the position of the mentee, to explore their challenges and the possible application of what I had experienced on my own journey. Every session starts with a check-in as to what is top of mind for the mentee and what they would like to explore. I ask a lot of open questions. Whether positive or negative, the stories I share

are not proscriptive: they are outcome-based and what I learned from my decisions. But while my experience allows me to anticipate some of the upcoming challenges for the entrepreneur, the agenda is set by the mentee: Raising capital, hiring and leading a team or dealing with customer challenges. Both Esther and I agreed at the outset that it was up to her, as the entrepreneur, to apply what I shared to whatever degree made sense, or not at all.

While working with Esther, I learned a lot - as much as I trust she did from me. In particular, her application of her own creative background to validating Joytingle's product-market fit and related customer engagement. These were the early days of Design Thinking, and Joytingle's product, Rabbit Ray was one of the first applications of DT to health care and the mental well-being of children I was aware of. When I went up to the whiteboard to draw something during our mentoring sessions, she would come up to me with her own marker, and it was very much a sort of an exchange between two colleagues.

I also learned from Esther that 'what roots you, grounds you'. Since the pandemic, we are much more aware of the importance of founder mental well-being. Wellness is certainly from mental, but also physical, because lifestyles of founders are not always the best ones - spending a lengthy amount of time sitting, consuming junk food, poor sleeping routines, for example. Esther approached these challenges through her own background and faith, and I could see her engagement with her community outside NUS and the business helped her resiliency and provided balance.

I think that the superficial value of mentoring for me as a mentor remains threefold: To stay current, connected and relevant. But deep down, the feeling of having made a positive impact on a younger entrepreneur is the lasting and most important reward. By definition, mentoring to me is altruistic. It is especially rewarding to follow the progress of my mentees as they develop and go on to being leaders and mentor themselves.

The entrepreneurship community that the staff, students, and mentors have built at NUS Enterprise, here in Singapore and around the world, has scaled impressively, and is often referenced as the Gold Standard. Singapore does community very well, compared to other ecosystems I have worked in - Singaporean students respects experience, want to make a contribution and have a healthy sense of both curiosity and fun. It is easy, even imperative in Singapore, to get together for good food in a group setting and share stories in a highly-engaging manner. This is the 'glue' that has enabled the ecosystem to thrive. Some of us joke about being periodically asked to perform 'National Service' - giving back to the NUS community through support of its programmes - is actually the catalyst of that glue. I am confident the community will remain resilient as we go through some of the current international challenges. We just need to put on our 'opportunity' goggles!



fired up

Invest

x



ELEVATE
FOUND

Why all businesses should embrace sustainability



Contributing to environmental, social, and governance (ESG) issues is becoming increasingly critical for all businesses across all industries in the world. For businesses, it is an opportunity to create long-term value in the industry. Unpack practical solutions from our recent discussions for businesses to improve sustainability practices.

HOW CAN START-UPS FAST TRACK CORPORATE SUSTAINABILITY AND SUPPORT SUSTAINABLE REPORTING?

Corporates are increasingly looking to meet and commit to sustainability targets. How do these targets translate to problem statements? How do start-ups better align their impacts to sustainability reporting frameworks? On 2 June, panellists gathered to discuss how corporates, start-ups and other ecosystem players can collaborate to fast-track sustainability innovation, particularly in circularity.

Sustainability is new and hard to tackle. Corporate innovation, as Eddy highlights, used to be a process achieved only internally. However, in recent years, there is now increased opportunity for corporates to work with start-ups at an earlier stage, instead of waiting for merger and acquisition (M&A). This brings about several advantages, including being able to access new technologies early, albeit less mature. Once these start-ups mature and hit the product market, corporates benefit from the close relationship that has already been established.

While this seems ideal, there are issues that both sides face when collaborating to achieve sustainability goals. Corporates often have trouble identifying the right start-up to work with, or are unsure about the right process of working with the start-up to ensure profitability and smooth working relations. An intermediary can facilitate communication between all parties involved, providing space for tweaks in business models that encourage diversified partnerships.

Panelists for the session:

Simon Baldwin

Global Head Circularity at SecondMuse

Eddy Lee

Managing Director, International Energy Transition at Startup Bootcamp

Nicholas Kolesch

Vice President of Projects at Alliance to End Plastic Waste

The different models of negotiating partnership between Corporates and Start-Ups that eventually funnels into M&A opportunities:



Corporate Venture Capital (VC) Fund:

Corporates looking for minority stakes in 30+ portfolio start-up companies, which allows corporates to create new business opportunities within the company and overcome innovation dilemmas.



Running In-house Accelerators:

Engage with less mature companies to run 1 or 2 month programmes within the corporate.



Hackathons!

THE CHALLENGES: PROFITABILITY, RELATIONSHIPS, AND A START-UP'S NICHE

Sustainability has not established its innovative legacy and the dynamics are constantly in flux. Nicholas identifies some pointers that have benefitted sustainability non-profits like Alliance to End Plastic Waste. What helped them and their start-ups was to understand a corporate's sustainability strategy and how their solution uniquely fits in. Finding internal champions and making business connections with people in the company who are seeking to move quicker or in a different direction is an entry way for entrepreneurs, and a wonderful opportunity to gauge if the solution a start-up wishes to present is novel.

As big corporations have a lot on their plate, start-ups can feel discouraged by delays in access to people and resources. However, start-ups should continue to believe in the surety of their value. Start-ups remain an attractive solution to corporates on whom it is incumbent to ensure that a solution is 100% successful before adopting it. Intermediaries can also be leveraged on to identify mentors within business units who want to work with start-ups and try something new.

LOOKING TO THE FUTURE OF CORPORATE AND START-UP DYNAMICS



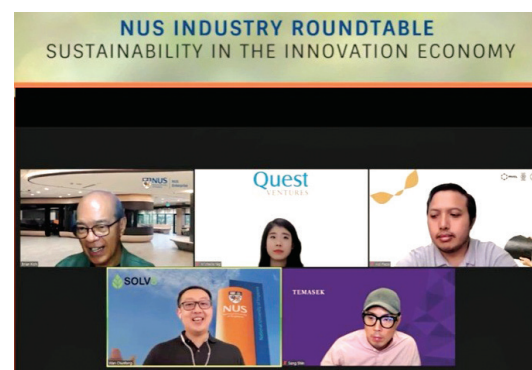
Corporates and start-ups alone will not be able to solve all problems. By applying lean start-up methods to community groups, issues can be solved holistically across the value chain. Not only is a collaborative ecosystem sustained, but innovative solutions also fall more in focus with the multi-disciplinary approach. Corporates and start-ups alike can look forward to a more bottom-up approach where corporates are experimenting with new and exciting ways of going into start-ups, instead of the traditional way where start-ups had to suit corporate preferences.



THE REALITIES OF SUSTAINABLE BUSINESSES IN THE INNOVATION ECONOMY

The pandemic has taught us many lessons and exposed the flaws of our social systems. While environmental concerns are still present and weigh heavily on our shoulders, the term “sustainability” has expanded to encompass social responsibilities too, in recognition of other pressing needs such as protecting the access to opportunities and resources for the vulnerable in our rapidly changing society.

Start-ups in our NUS Enterprise ecosystem have stepped up to the challenge, thinking of innovative ways to change business narratives in the pursuit of sustainability goals moving forward. Investors have also put more emphasis on supporting and working alongside start-ups who are looking to spearhead a new set of value systems in innovation.



On 11 May 2022, NUS Enterprise moderated a NUS Industry Roundtable on the Singapore Week of Innovation and Technology (SWITCH) virtual platform. Leading investors and start-ups gathered to discuss the realities of sustainable business trajectories in the innovation economy.



WHAT IS SUSTAINABILITY AND ESG ALL ABOUT?

The word “sustainability” has been thrown around so much that people often dismiss it as a passing trend, or as something that businesses simply include to stay relevant. Mr. Brian Koh, Director of NUS Enterprise and moderator of the session, asked the crucial question of what sustainability really means to investors and start-ups alike who claim to be driven by sustainable goals. Chun Feng responded to the question, saying that sustainability from the business point of view is threefold. First, a sustainable product or service must reduce in-house waste. Aside from this environmental benefit, sustainability also includes being durable, and sustainable to the customer. A comprehensive approach to sustainability not only ensures that environmental damage is reduced - and in some cases, reversed - but that customers who see the value in this solution are able to afford it and continue to benefit over a substantial period. Michelle added on to this discussion,

Panelists for the session:

Michelle Ng, who is the Head of Environmental, Social & Governance at Quest Ventures. She is currently also the Director of QV's Sustainable Impact Accelerator.

Sang Shin, the Director of Digital Innovation at Temasek.

Adi Reza, the Co-founder and Chief Executive Officer of Mycotech Labs. Mycotech Labs is affiliated to both BLOCK71 Singapore and BLOCK71 Jakarta. The biotech company based in Bandung focuses on growing sustainable materials using mushroom technology.

Chun Feng Wan, Co-founder and Chief Executive Officer at SOLV8 Technology. Chun Feng is a NUS GRIP alumni who founded SOLV8 - a cleantech start-up with a vision to achieve energy efficient solvent recovery for industries.

highlighting the importance of companies and start-ups to realise that sustainability is no longer simply about the environment. Her hope is that sustainability efforts will also help to create a more inclusive, equitable world for all, by always being on the lookout for those left behind and using our innovations for good. She identifies financial and digital inclusion as current gaps in our society that innovators driven by sustainability could set out to meet.

THE MOVE TOWARDS SUSTAINABILITY STARTS WITH US

Sustainability, as Sang mentioned, means moving away from existing modes of production and developing new innovation systems. Sustainability is about righting past wrongs and taking accountability for the damage that we have created in the pursuit of exponential advancements. While some might be unsure about how to navigate this new terrain, Sang suggested that using your business for good is only possible when individuals focus on their own welfare and support systems first. Prioritising well-being and taking care of

yourself is the first step towards taking care of the Earth.

Adi observed that sustainability in retail also requires the commitment and cooperation of both the consumers and the brands. Wanting to cut back on carbon emissions, Adi uses this goal to ensure transparency with corporates who encourage Mycotech Labs to achieve this goal. In doing so, Mycotech Labs keeps track of their sustainability goals. He is appreciative of the younger generation, whom he acknowledges as leading the change towards sustainable fashion consumption.

“DO WELL AND DO GOOD”

In conclusion, all panelists agreed that sustainability needs to be heavily integrated into all business models. It is best to start thinking of sustainability now, before it is too late, or when it gets too expensive. Mycotech Labs and SOLV8 also encourage other start-ups to look at the bigger picture and focus equally on internal sustainability to secure the longevity of sustainability efforts across the globe.

Enjoyed this coverage of NUS Industry Roundtable?

Consider checking out enterprise.nus.edu.sg or follow us on our social media pages to catch other events like this!



THE MARITIME INNOVATION ECOSYSTEM GATHERS TO ADDRESS THE INDUSTRY'S PRIORITIES

With easing of travel restrictions and other measures around large-scale events, the maritime innovation ecosystem has been busy getting the much-desired face time. Being at the heart of this ecosystem, PIER71™, a joint collaboration between MPA and NUS Enterprise, was in the thick of 3 major events from April to June.

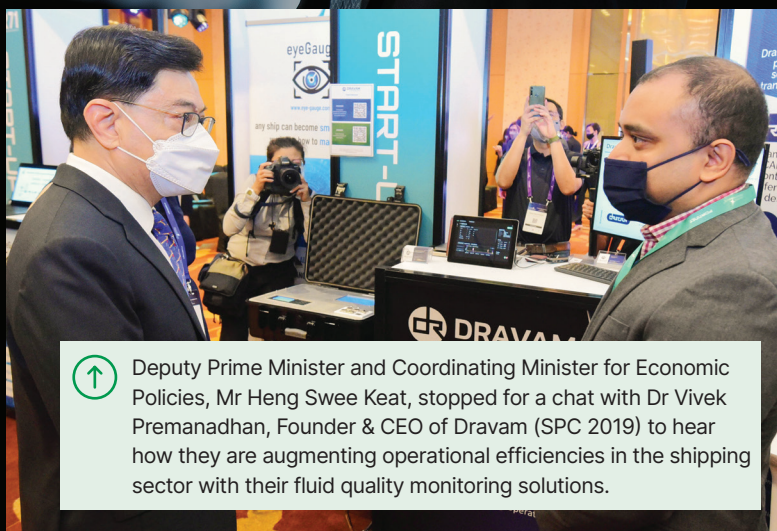


↑ Robin Yang, Board Director & Group CFO of SCI Ecommerce delivered a keynote address on 'Building the Next Generation of Cross-Border Ecommerce through Technology'.

SINGAPORE MARITIME WEEK (SMW) 2022

The Singapore Maritime Week (SMW) is an annual gathering of the international maritime community to advance key industry issues and exchange ideas to bring the sector forward. Driven by the Maritime and Port Authority (MPA), in collaboration with industry stakeholders and research and educational institutions, SMW brings together key opinion leaders and industry leaders through conferences, dialogues and forums. The theme of this year's event, 'Transformation for Growth', explores the momentum built up by the industry in taking key steps towards digitalisation, while tackling the urgent issue of climate change.

Held as a hybrid event at the Marina Bay Sands Expo and Convention Centre from 4 – 8 April, the SMW2022 programme included a MarineTech Conference and Exhibition, for which PIER71™ was an Innovation Partner. The PIER71™ Start-up Pavilion, comprising 10 start-up booths, was bustling with activity with visits from maritime corporates, investors and other industry stakeholders. Singapore's Deputy Prime Minister and Coordinating Minister for Economic Policies, Mr Heng Swee Keat, and Senior Minister of State for Transport, Mr Hong Chee Tat also stopped by on separate occasions to learn more about the innovation these start-ups are bringing to the maritime sector.



↑ Deputy Prime Minister and Coordinating Minister for Economic Policies, Mr Heng Swee Keat, stopped for a chat with Dr Vivek Premanadhan, Founder & CEO of Dravam (SPC 2019) to hear how they are augmenting operational efficiencies in the shipping sector with their fluid quality monitoring solutions.



↑ Mr Hong Chee Tat, Senior Minister of State, Ministry of Transport, re-connected with Rodion Denisyuk, CEO of eyeGauge (SPC 2021), a France-based start-up planning to expand their operations in Singapore.

In addition to showcasing the latest start-up innovations through the MarineTech Exhibition, PIER71™ also brought together speakers and panellists from the maritime innovation ecosystem for the VC and Start-up Track during the MarineTech Conference to boost awareness on the power of collaboration and innovation in strengthening Singapore's position as the top Maritime Technology City.

Moderator:
Chua Chye Poh, Founder, ShipsFocus, Singapore

Panellists:
Thomas Ting, Chief Technology Officer/Deputy Director, Innovation, Technology & Talent Development Division, Maritime and Port Authority of Singapore
Nidhi Gupta, Co-founder & CEO, Portcast, Singapore
Ronny Waage, Regional Manager, ScanReach and Digital Transformation Committee Member, Singapore Shipping Association (SSA), Singapore
Chris Chung, Director, Digital Innovation & Strategic Projects, Wärtsilä, Singapore

trail blazers



Moderated by Chua Chye Poh from ShipsFocus (extreme right), panellists (from left to right) Chris Chung (Wärtsilä), Ronny Waage (ScanReach / SSA), Nidhi Gupta (Portcast) and Thomas Ting (MPA) share their insights on 'What it Means to be the Top Maritime Technology City'



(From left to right): Grace Chia (BeeX), Jeremiah Chen (Mencast), Dr Vivek Premanadhan (Dravam) and Kristina Lynge (Riverr) share first-hand examples of start-up / corporate collaborations in a panel on 'Measuring Impact of MarineTech'. Moderated by Shaun Hon (Motion Ventures).

LAUNCH OF SMART PORT CHALLENGE 2022

Smart Port Challenge (SPC) 2022 was officially launched on 20 May by Mr Chee Hong Tat, Senior Minister of State, Ministry of Transport, at the Singapore Maritime Gallery. Guests were invited to experience Singapore's rich maritime heritage as they meandered through the exhibits and start-up showcases featuring past SPC start-ups before the main event.

This year's challenge features 15 innovation opportunities co-created and supported by 22 maritime organisations. Together with PIER71™, these corporates held a series of hybrid and virtual events in June to help start-ups gain a better understanding of their challenges. Applications will close on 22 July and short-listed start-ups will begin their PIER71™ Accelerate journey at the end of September before top teams pitch at a Grand Final in November.



(From left to right): SPC alumni Chia Lye Peng (FlexoSense), Eugene Ng (WeavAir), Chu Yun Sil (Moaah) and Dr Marcus Chen (Vebits) shared their experiences and learnings during the launch event.



(From left to right): Moderated by Dr Sanjay Kuttan, (Global Centre for Maritime Decarbonisation), the panellists included Wei Siang New (MPA), Sheen Mao Choong, (Equatorial Marine Fuel Management Services Pte Ltd) and Jing Xieng JX Han (GoodFuels)

INNOVFEST X ELEVATING FOUNDERS 2022

Back as an in-person event from 1 – 3 June, InnovFest x Elevating Founders 2022 was a refreshing change for start-ups to showcase innovations, network and gain exposure to new ideas and technologies. Along with eight start-ups from previous runs of Smart Port Challenge, PIER71™ was in active conversations with stakeholders in the ecosystem throughout the 3 days.

As a Platinum sponsor, PIER71™ also gathered a panel of industry experts to share their insights on the role of technology in driving maritime decarbonisation, how we can make an impact collectively as an ecosystem, and the roles that start-ups and entrepreneurs can play.



A recording of the panel discussion is available at: youtu.be/oEG-W8uUmEg



It takes a community to raise a start-up

PERSPECTIVES FROM OUR NUS ENTERPRISE START-UPS ON HOW VARIOUS MEMBERS OF THE ECOSYSTEM CONTRIBUTED TO THEIR UNIQUE JOURNEYS



**CHENG HUIMIN, LOW YIN YI,
YONG JIE LIM LEXDAN**

Vilota (GRIP, PIER71)

3D vision sensing is an emerging key technology in robotics autonomy as it represents the eyes and brains of mobile agents like robots, drones, and even autonomous cars. There are very few companies in Singapore that develop 3D vision, and Vilota aims to bring 3D vision to more users by lowering the technical barrier and cost. In this article, Vilota's founders share more about their journey on starting and running a tech company.

INSPIRATION TO START VILOTA

We were a research sub-group in NUS Temasek Lab developing a new robotic vision system. We then chanced upon and attended a presentation by NUS Graduate Research and Innovation Programme (GRIP) and were attracted by the generous resources (advisory and funding in particular) to help graduate researchers with commercialisation. We found a great alignment of objectives as we always aimed to democratise visual perception technology by lowering the access barrier for all tech companies.

TAKEAWAYS FROM OUR ENTREPRENEURSHIP JOURNEY

We were advised by experienced mentors and exposed to various

business opportunities. In general, our biggest takeaway was the wide people network at GRIP and later, through Port Innovation Ecosystem Reimagined at BLOCK71 (PIER71™). We are thankful for their ability to attract many stakeholders, of whom are hard to reach in our own capacity. One notable example was securing a proof-of-concept (POC) project with Jurong Port to develop 3D visual sensing capabilities for depth perception.

While most start-up founders are respectable technical experts in their respective fields, mentors are crucial in advising the process of founding, operating, and funding a company. They help founders overcome practical issues in the business world. Besides, most mentors have a wealth of personal connections and can refer you to many like-minded people who can help grow your company.

NEW OPPORTUNITIES WITH THE RESUMPTION OF PHYSICAL MEETINGS AND EVENTS

We exhibited at InnovFest x Elevating Founders 2022 and felt that our physical presence in a large-scale exhibition enabled us to interact with

stakeholders with ease. The impact is especially beneficial to our company as we develop both software and hardware. We found that in-person demonstrations give more assurance to potential customers and investors because they can touch and feel our products. It is always easier to network with people in a physical setting. We are happy to show our technology in-person as it is an achievement in this niche technical field.

TIPS FOR ASPIRING ENTREPRENEURS

We hope our journey will inspire other aspiring entrepreneurs, being young entrepreneurs ourselves! We can say for certain that starting and running a company is no mean feat, so aspiring entrepreneurs can approach resourceful incubators like GRIP and PIER71™ to learn from mentors and receive other forms of assistance. Most importantly, young entrepreneurs need to upkeep their passion and willpower to see their companies through their ups and downs!

NOTABLE ACHIEVEMENTS
Smart Port Challenge 2021
Finalist



PETER FINN

Synectify (THE HANGAR, GRIP)

INSPIRATION TO OPTIMISE ENERGY IN POWER GRIDS

Synectify's origins go back to 2016 while I was studying in the UK. During a summer consulting project, I was helping make a commercial property more energy efficient by installing 'combined-heat- and-power' (CHP) systems (A miniature power plant capable of generating both electricity and heat) as an alternative to connecting to the energy grid. While less expensive to operate, these systems needed to run continuously to power and heat the building. However, that daily energy use would only peak for a few hours a day, leading to a lot of waste. I had the idea of solving this waste energy surplus by connecting a Bitcoin mining system to the CHP units — a solution that would improve the system's profitability and could be easily disconnected during periods of peak electrical demand. This project got me thinking that a similar approach could be taken to optimising energy use at grid-scale.

A year later, in 2017, I met a new friend who had the same idea and the two of us co-founded Drone Energy — a start-up focused on developing Bitcoin mining solutions engineered to be installed directly at power plants to give them an alternative to selling to the grid when energy prices were low. We called this business model 'base-load-as-a-service' (BaaS) and pioneered its deployment. This start-up was tough to get off the ground, but we eventually bootstrapped it into a successful venture.

RENEWABLE ENERGY INNOVATORS

Over the course of this journey, I became increasingly aware of the impact renewable energy was having on power grids. Renewable energy tends to be 1) Variable and 2) Often generated far from where the energy is used. Both qualities lead to surpluses of renewable energy. There was an opportunity to take the lessons I had learned with my previous startup and apply them to this new problem of surplus renewable energy by using high-density computing systems to replace the Bitcoin mining component. Synectify was thus founded with the

aim of building a distributed compute network aimed at tapping this surplus renewable energy and sourcing customers for it much the way Uber (or Grab) sourced riders for unused fleet vehicles — thus creating a sort of 'Uber for compute'. This value proposition was being a cost-optimised, carbon neutral computing platform.

Our founding team emerged from among colleagues and coworkers. Dr Echo Wang was a colleague of mine at NUS. She is also very entrepreneurial and did her research in social enterprises and entrepreneurship — and so was a natural fit for the impact focus we wanted this new venture to take. Echo is an NUS Valedictorian PhD, with a strong personal network in both China and Singapore, excellent business judgment, and relationship management skills.

Later, I met one of my co-founders, Jonathan, while he was with a 3rd-generation blockchain project called RChain. He recruited me to be on the advisory board of RChain Asia, which was to be based in Singapore. The RChain project was visionary but because of business decisions beyond our control, there was insufficient funding to keep RChain Asia going for over a year. Jonathan and I left our respective positions and I recruited him to join Synectify.

KEY TAKEAWAYS FROM OUR JOURNEY

Being in a leadership position in a tech start-up can be one of the loneliest and most terrifying journeys. One is undertaking something which not many have done before; no one can really offer much guidance on how to proceed in many situations. A good mentor may not be able to give one the answers, but they can offer a fresh perspective, identify weaknesses, reinforce strengths, open doors — and be a shoulder to cry on and a friend to celebrate achievements with.

NUS has been a constant source of support for Synectify from the start of our journey in GRIP to the present. NUS was the first to believe in us — which means a lot. The university has helped our journey immeasurably by giving us a firm base on which to take root and a salubrious environment in which to

grow, and flourish. The progress and recognition that we have achieved

in the past year is all traceable back to the help and support we have received from GRIP, THE HANGAR and BLOCK71.

It was overall much more productive to be physically present at InnovFest this year. We managed to get over thirty potential customers signed up for our platform and made lots of contacts with VCs and generated a few business leads. It was at InnovFest last year that we were introduced to the Shell Start-up Engine Accelerator. We went on to be accepted into SSE21 and it was major turning point in our journey.

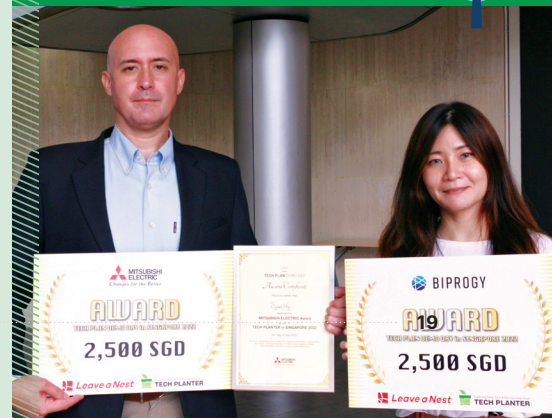
It was also great to be able to pitch onstage during Elevating Founders and I was invited to moderate a live panel on impact investing in start-ups. Holding it in-person was interesting, engaging, and impactful.

ADVICE FOR NEW ENTREPRENEURS

My tips for aspiring entrepreneurs: Make sure you have co-founders who disagree with you; Cultivate a diverse team — diversity better confronts adversity; Do not worry about the competition; Learn to see the opportunity in apparent setbacks.

NOTABLE ACHIEVEMENTS

- Biprogy & Mitsubishi Electric Award, Tech Plan Demo Day In Singapore 2022
Technology theme: Crystals-AI base decentralized model of using green energy
- 2022 Elevating Founders Asia Finalist – ATxSG





bright ideas



START-UP PRODUCTS THAT BUILD A HARMONIOUS COMMUNITY

Creating innovative products is not just merely about profit-generating, but more importantly, these transformative products set out on a mission to give back to the community. These products provide a safer, happier, greener online and offline community and connect people together for a tighter Singaporean society.

On that note, Happy National Day, Singapore!

Moevmnt

Venture Building Programme

ELECTRIC BICYCLE SUBSCRIPTION From \$99 every month

Greener and safer community

Moevmnt provides a comprehensive electric bicycle subscription solution that covers an e-Bike designed for the city landscape, the necessary insurance, a smart battery charging and swapping network, as well as an app that tracks, communicates ride metrics, and optimises rides and enhances security—creating a greener and safer solution for us to commute around the city.

Invigilo Technologies

NUS Overseas Colleges (NOC), NUS Graduate Research Innovation Programme (GRIP), BLOCK71 Singapore

INVIGILO SAFEKEY™ Contact the team at invigilo.ai/contact/ for more info

A safer workplace

The Artificial Intelligence (AI) video analytics software company ensures real-time critical detection that can improve workplace safety, quality and productivity in high-risk environments. Their software can be implemented across different industry verticals such as construction sites, shipyards, manufacturing plants and more.

Hiomi

NUS Graduate Research Innovation Programme (GRIP)

HIOMI APP Up to \$99 per year (Currently free during Beta testing)

Helping to keep kids safer online

60% of 8 to 12-year-olds are exposed to cyberbullying, game addiction, online grooming, and sexual content. The Hiomi application monitors various phone applications and functions for potential safety concerns, so busy parents can have peace of mind.

Scent Journey

Venture Building Programme

CLOUDS IN HEAVEN PERFUME \$153

Scents with therapeutic properties for stressed-up millennials

Scent Journey is working to empower us to feel our best with perfumes. Their perfumes are not only made to smell good, they are mindfully formulated with purpose and designed to support our well-being too. Their fragrance - Clouds in heaven, has a top note of Pandan scent, an iconic plant of Singapore.

Universitas123

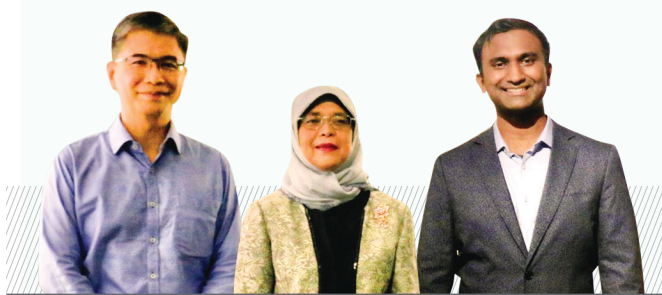
BLOCK71 Indonesia

WEBSITE FOR TERTIARY EDUCATION Available for all to use

Tighter education community

Universitas 123 is a one-stop platform for all tertiary education needs. Ranging from scholarships, online courses, summer programmes to internships, this digital educational platform focused for Indonesian students connects university students to one another as well as external help that they might need for any educational purposes.

NEWSFEED



On 6 June 2022, we were very happy to welcome **President Halimah Yacob** during her visit to Invigilo Technologies at BLOCK71 Singapore. **Vishnu Saran**, company founder and NOC alumnus, shared about how their Artificial Intelligence (AI) video analytics solution analyses videos from different industries to prevent accidents and enhance workplace safety. They also participated in **NUS GRIP** and are currently incubating at BLOCK71 Singapore.

Coda Payments and Biofourmis

are our 8th and 9th unicorns!

Coda Payments, former BLOCK71 Singapore incubatee, raised US\$690 million in their recent funding round and reached an estimated valuation of US\$2.5 billion. **Biofourmis**, former THE HANGAR incubatee and PGP5, valuation has hit \$1.3 billion after raising \$300 million in funding.



On 20 May 2022, the Maritime and Port Authority of Singapore (MPA) awarded 11 **PIER71™** start-ups a Maritime Innovation and Technology (MINT)-STARTUP grant for prototype development and test-bedding. Since 2017, 50 start-ups have received the grant and over S\$2.45 million of funding has been dispersed. These 11 start-ups are collaborating with maritime corporate partners from **PIER71™** on pilot projects that focus on the use of smart sensors, vision and data analytics, artificial intelligence and wearables amongst others.



The start-up ecosystem becomes more holistic when start-ups themselves invest into others, which is precisely what **Funding Societies** and **Carro** have done, by co-investing in Indonesia's **Bank Index** - a privately-owned national bank that focuses on SMEs and consumer banking. This new partnership aims to expand the capabilities of the fintech industry.

To recap past NUS Enterprise events and stay apprised of those upcoming, please refer to the following QR code.



RECENTLY REPORTED FUNDING & ACQUISITIONS IN OUR START-UP COMMUNITY:

- AI Communis, Angel Round; US\$300 million
- Alami – Debt facility from Lendable; US\$30 million
- Biofourmis – Series D; \$300 million
- CBE Eco-Solutions – Pre-Series A; US\$3.96 million*
- Coda Payments – Series C; US\$690 million
- Microtube Technologies – Seed; US\$808,523
- NEU Battery Materials – Seed; US\$576,000
- Oddle – Pre-Series B; US\$5 million
- Pinhome Indonesia – Series B; US\$50 million
- Qoala – Series B; US\$65 million
- ShopBack – Series F; US\$80 million
- SpaceAge Labs – Seed; US\$1.25 million
- Tessa Therapeutics – Series A; US\$126 million
- The Parentinc (Formerly Tickled Media) – Series D; US\$22 million

All info based on public news sources.

**Funding was converted from the funding's specified currency to USD.*



NON-FUNGIBLE TOKENS (NFTS) - WHAT'S THE BUZZ?

NFTs have been such a buzzword recently that it is easy for someone not metaVERSED to get lost in all the noise. In this article, we bring you an exclusive interview with VMeta and Associate Professor Keith Carter about what NFTs are, the spaces within which they are useful, the types of NFTs business find valuable and how to proceed.

VMeta is a one stop NFT analytics and trading platform, combining all tools that an NFT trader needs in one single dashboard. VMeta also has a membership system that allows NFT traders around the world to find community. The platform supports English, Chinese, Japanese and Korean speakers.



Keith Carter is an Associate Professor at the National University of Singapore (NUS) School of Computing, Department of Information Systems and Analytics. He is Director of the NUS Ripple FinTech Lab, an experiential education lab, and Co-Director of the Crystal Centre, a deep-tech FinTech think tank of cryptocurrency, security, technology, and algorithms. He also teaches business leaders in the Advanced Computing for Executives and the Lee Kwan Yew School of Public Policy. He is a member of the Singapore CyberSecurity Consortium, and a member of the NUS AI Lab. He is also the author of Amazon Bestseller "Actionable Intelligence: A guide to delivering Business Results with Big Data, Fast!" Wiley, New York 2014.

WHAT IS A NON-FUNGIBLE TOKEN (NFT)?

Prof Carter: A token is a way to represent some value. You might remember if you go to a carnival, you will take your money and buy tickets or tokens to use at the carnival games. But you cannot take and use those that you have left over [at a physical store like 7-11]: it is a token, not real money.

So, even though these things are called currencies, they are still tokens. You can only use them on certain platforms. Non-fungible tokens are, using the Blockchain, which stores transactions, and saying that you own a particular token. And its serial number, its identification, is specifically tied to your wallet.

Although NFTs are often called digital currencies, they are not to be mistaken for actual currency! NFTs are assets in the metaverse that facilitate decentralised investment and business growth. However, as with all types of decentralisation, it is important to make full use of the security and flow of cryptocurrency in the blockchain to show proof of value and build trust in the metaverse.



WHAT ARE THE BENEFITS OF USING NFTS?

VMeta: We use NFTs to engage with our early supporters. They pay a premium for our existing features and have access to our roadmap. This helps us to fund our existing projects. NFTs have a lot of intrinsic and external value. It is becoming more common in Web3 games, as there are a lot of game assets in NFT form that people trade in certain games.

Prof Carter: NFTs really come to life in a digital environment. In the metaverse, the kind of consumer data you could potentially get exceeds that of the physical realm. The data is so much richer for advertisers and big brands. Big corporations should be a part of the metaverse simply because they need to transform, and they need a place to cheaply engage customers to see if the transformation is in the right direction. Like, let us say that a real estate company wants to visualise a new type of mall concept. They could create a mall in the metaverse, much cheaper than a physical one, invite people in and see if they enjoy it or not. The metaverse is a playground for big brands who can try things out.

SME's can come in to help the big companies realise these visions, and sieve through the data. Because the big companies may not have all the people, expertise, and data to make this happen, and they do not necessarily have access to the meta community. They can also work with different platforms and programmes, and create a business opportunity by coming in and trying to streamline the existing differences between programmes. This then helps big companies to draw on meta market research and invest or experiment on their brand accordingly.



THINGS TO TAKE NOTE OF

VMeta: The metaverse is a different world. In our physical world, we can use normal marketing and leverage on social media, etc. But for Web3, the social aspect and social media is a bit different. One needs to learn how to manage the community through platforms like Discord. It is also important to diversify your NFT investments, as creating just pure digital NFT art might be difficult to sell considering market saturation amongst other factors.

Prof Carter: I hope that companies do not make the mistake of thinking: "NFTs, I can use this for physical things." It is just a waste of time and money, especially for small businesses. But buying a house in the metaverse, now your NFT makes sense. If I destroy the house in the metaverse, your NFT is no longer useful, and vice versa. There is a perfect connection between the two. But at the same time, [I would advise small businesses to] think a bit further. It is just a matter of finding your space in the economic environment. To play with NFTs means playing in the digital world which has come alive in the metaverse.



Ready to join our NUS Enterprise entrepreneurship ecosystem?

NUS Enterprise, the entrepreneurial arm of the National University of Singapore (NUS), plays a pivotal role in advancing innovation and entrepreneurship at NUS and beyond.

NUS Enterprise actively promotes entrepreneurship and cultivates global mind-sets and talents through the synergies of experiential entrepreneurial education, active industry partnerships, holistic entrepreneurship support and catalytic entrepreneurship outreach. Its initiatives and global connections support a range of entrepreneurial journeys and foster ecosystem building in new markets. These initiatives augment and complement the University's academic programmes and act as a unique bridge to industry well beyond Singapore's shores.

Learn more about how we can support you in your entrepreneurial journey.

Find out more



Join our events



If you are an entrepreneur affiliated with NUS Enterprise, find out how you can:



Give back to the community



Join our NOC and BLOCK71 anniversary celebrations

Have a question or a suggestion? Reach out to us at enterprise@nus.edu.sg.