

MSDUK®

INNOVATION 

CHALLENGE 2020

MEET THE 12 INNOVATORS  
CREATING BETTER IDEAS  
FOR A **BETTER WORLD**

2020



FOURTH YEAR

# WELCOME TO THE MSDUK 2020 INNOVATION CHALLENGE

## WHERE INNOVATION MEETS INDUSTRY

The MSDUK Innovation Challenge is a unique competition that offers ethnic minority founders with innovative products or solutions access to knowledge, investment, and market opportunities. It is designed to promote inclusive innovation and tackle under-representation of Ethnic Minority-led Businesses (EMBs). We offer an exclusive and unique platform to support ethnic minority founders with a new idea; helping them develop these ideas, access investment and market opportunities and bring those ideas to life.

**APPLICATIONS:**  
400 + SINCE 2017



**GENDER:**  
57% MALE  
43% FEMALE



**DIVERSITY:**  
46% ASIAN  
39% BLACK  
16% OTHERS



**STAGE:**  
18% IDEA  
41% PROTOTYPE  
14% LAUNCHED  
12% USERS  
15% REVENUE



As we embrace the new digital age that is driven by technological advancement, innovation takes centre stage in every corporate strategy. **There is strong evidence that innovation mostly comes from small businesses and start-ups.** It is of because this major change, that we must ensure we address the lack of opportunity affecting ethnic minority start-ups and avoid a situation where start-ups are separated into the 'haves' and the 'have nots' and the 'have nots' are overwhelmingly those led by diverse founders.

MSDUK breaks down barriers to entry for EMBs by giving them direct access to a range of highly influential business leaders, corporate sponsors, training, and support. The competition prizes – cash injections for the winning idea, scholarships, mentoring and access to market – giving innovators and entrepreneurs the boost they need to develop their big ideas into successful businesses.

**“You have to be burning with an idea, or a problem, or a wrong that you want to right. If you’re not passionate enough from the start, you’ll never stick it out.”**  
**Steve Jobs**

PRIZES	£5,000	£40,000	£100,000	£200,000
	<b>CASH PRIZE FOR THE CHALLENGE WINNER</b>	<b>WORTH OF BUSINESS SCHOOL SCHOLARSHIPS</b>	<b>WORTH OF CORPORATE MENTORING</b>	<b>20+ PLACES ON GRANT FUNDED PROGRAMMES</b>
	Introductions to our investor network and workshops	At Ivy League Tuck School of Business for the top for finalists	12-18 months corporate mentoring programmes	From our partners

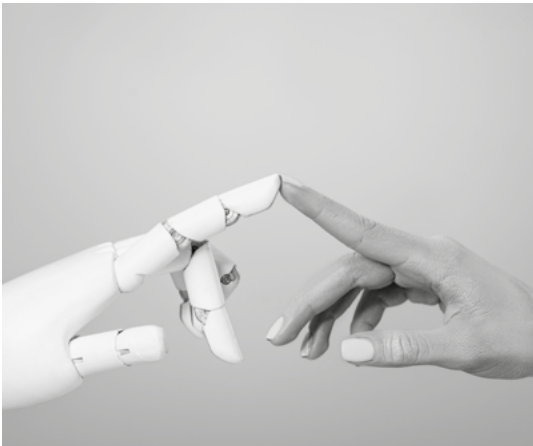
In its 4th year, the 2020 competition saw an increased number of overall applications, greater gender and ethnic mix in applicants and a more equal regional representation, making it a truly national competition. This year’s theme, **‘Better Ideas for a Better World’**, focuses on technologies, products, services, or business models in 4 key areas: **Advanced Digital Technologies, Social Innovation, Healthcare & Wellbeing and Sustainable Futures.**

Our thanks to **Cummins, Digital Catapult, GSK, EY, Eaton and Accenture** for sponsoring this year’s competition. The growth and popularity of the competition would not have been possible without our industry partners, universities and investors that have promoted the competition and referred so many amazing entrepreneurs to apply for the challenge.

Finally, thanks to all the 2020 applicants – you are all great innovators – shaping the future and creating products, ideas and solutions that are going to make this world a better place for our future generations. Let us all keep developing better ideas for a better world.

**Mayank Shah**  
Founder & CEO, MSDUK

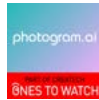
# THE FOUR CHALLENGE CATEGORIES



## ADVANCED DIGITAL TECHNOLOGIES

SPONSORED BY DIGITAL CATAPULT

Ideas for the future that utilise Artificial Intelligence & Machine Learning Immersive (VR, AR, XR & Haptics), Future Networks (5G, LPWAN & IoT), Distributed Ledger Technologies.



Click the innovator you wish to view



## HEALTHCARE & WELLBEING

SPONSORED BY GSK

Addressing issues around better health and wellbeing for our future generations, using technology to make medicines and healthcare affordable and accessible to all.



Click the innovator you wish to view



## SOCIAL INNOVATION

SPONSORED BY EY

Ensuring that the benefits of social and economic development are reaching everyone in society.



Click the innovator you wish to view



## SUSTAINABLE FUTURES

SPONSORED BY EATON

Creating innovative technologies that address environmental challenges and promote sustainability.



Click the innovator you wish to view



# Meet Vishal Kumar

**CEO**  
**Photogram Ltd**

**Stage: Pre-Seed/Prototype**  
**Investment required: £150,000**

[LINKEDIN PROFILE](#) >



[WEBSITE](#) >



## About Vishal

Vishal is the CEO of Photogram AI, a computational photography startup based at the UCL university incubator who are building an AI camera called the Alice Camera™. Vishal is a cultural data scientist with extensive experience managing machine learning and data visualization projects in the creative industries. He was a semi-finalist in the Creative Industries Award for the Mayor of London's Entrepreneur Competition 2019 and as a member of the Museum AI Network speaks regularly about the use of AI in art and creative technology. Vishal previously worked at Sotheby's auction house as one of the company's first-ever Data Scientist and studied at the London School of Economics, the Sotheby's Institute of Art, and at The Bartlett, UCL.

## Elevator pitch

Photogram AI is a computational photography startup, founded on Entrepreneur First in June 2019 and is currently incubated at UCL's BaseKX, specialising in AI hardware and software for the \$100 billion digital photography market. We are developing the Alice Camera™, a novel, AI camera for the 40 million income-generating content creators and photographers.

Our mission is to empower creatives with the necessary, open and modern tools to enhance their art form.

### The problem

Despite this continuous growth of digital visual sharing, a lack of innovation in digital cameras over the decades has failed to supply a suitable product to meet the growing demands and needs of content creators. Sales in digital cameras have collapsed from 120 million in 2010 to 15 million in 2019.

### The opportunity

Our target customers are the 40 million income-generating content creators worldwide who rely on a dedicated camera to earn an income by producing high-quality content. This group is growing at 25% annually and demanding much more from their imaging tools

### The solution

Our solution to the issues faced by our market is to create an end-to-end deep learning camera system, the Alice Camera(TM), to serve the needs of content creators and photographers. Our team will develop our core technology; the camera hardware, AI and computational photography features, which will then be commercially manufactured by our contract manufacturer in Britain.



# Meet Veronique Trang

**Founder & CEO  
Storyskimo Ltd**

**Stage: Seed/Users**

**Investment required: £500,000**

[LINKEDIN PROFILE](#) ➤



[WEBSITE](#) ➤



## About Veronique

Veronique was born in Paris to Chinese Cambodian immigrants. As a child, her parents didn't speak French then, and as a result she was rarely read to in French. She would have very much enjoyed listening to audiobooks then!

Freshly graduated, she arrived in London in 2007 to work for Ernst & Young as a consultant. She then set up her first street food startup in 2010. Her biggest learning then was that testing and collecting user feedback quickly was the crux of everything.

More recently, as a corporate innovator she has helped many Unilever brands collaborate with innovative tech startups to explore new business models. In 2019, she was ready to start her new venture.

Veronique is a mum of two and with STORYSKIMO, she is pledging to offer children a brighter future through the power of technology.

Veronique holds a Masters degree in Finance.

## Elevator pitch

STORYSKIMO is an audio-led platform where children engage with audio-stories and podcasts. Audio storytelling stimulates their imagination, boosts their love for the spoken word and literature, and helps them become great listeners and therefore great learners.

### The problem

Immediate market need related to COVID-19 and beyond. Due to COVID-19 measures, elderly's emotional wellbeing might suffer from the lack of connection with their loved ones for an extended period of time. According to AgeUK, out of 14M grandparents in the UK, 5M usually take on childcare responsibilities, who have now dramatically reduced the time they have with their grandchildren - With this project we will also contribute to the collective fight against the impact of COVID-19 on children's education.

### The opportunity

Total addressable market in the UK is £1bn (9.7M children 0-11yo x 8£/monthly subscription). We aim to engage 7% of them in y1 (freemium) and convert 30% of those to paid subscribers thanks to this project.

According to Deloitte insights the biggest audiobook market is the US and sales prediction for 2020 was US\$1.5bn with a CAGR of 20-25%. According to the Publishers Association, UK audiobook sales surged 43% to £69m in 2019. In 2017, children audiobooks made up 40% of the audiobook titles sold in China, 10% in the United States, and 25% in France.

### The solution

With this project we want to create a new functionality on our existing platform called the memory box that will allow grandparents to become their grandchildren's storytellers. We preserve the memory and continuity of their relationship. It also allows children to practice their storytelling skills by creating and recording their own audiostories on our platform.



# Meet Bella Ngo

**Co-founder & CEO  
Brarista**

**Stage: Seed/Prototype**

**Investment required: £300,000 - £500,000**

WEBSITE



## About Bella

Bella Ngo, Royal Academy Engineering's Enterprise Fellow 2020, and UCL representative to attend the Santander Emerging Entrepreneur Competition. Her studies and entrepreneurship experience have been concentrated on consumer behaviours with direct-to-consumer brands. During her undergraduate at UCL and Harvard University, Bella founded three startups. She also started her career in strategy consulting, where she closely worked on the planning of Pret-A-Manger's international expansion (Dec 2016). She was in charge of co-designing and co-managing the user experience at Heist Studios (an innovative underwear start-up) from online to their first offline store (Nov 2018). Bella brought the Brarista concept during her Masters's studies and performed full feasibility studies to identify commercial opportunities. After speaking to hundreds of women, she built a clear understanding of bra-shopping pain-points and customer behaviours to incorporate these into building Brarista.

## Elevator pitch

Brarista compliments retailers' competitive e-commerce presence, leveraging Computer Vision and real-life bra-sizing data to automate offline professional-bra-fitting. As a pre-launch B2B2C

software-as-a-service, via partnered retailers, bra shoppers can use any digital-camera to find the correct bra-fit across available brands & styles based on their shapes and fashion needs.

### The problem

The global lingerie market is plagued by a series of consumer pains, including the pervasive bra-fit problem. Up to 80% of women continue to wear and shop the wrong bra size, with little variation in this statistic across the past decade, even though incorrectly-fitted bras are associated with health problems like the thoracic spine or posterior chest wall pain to under-breast scarring.

Not only is getting a bra fitting in-store is a time-consuming, inconvenient, and embarrassing for those with low self-confidence, the problem's pervasiveness is exacerbated by the high number of low-quality fitters in high-street retailers.

### The opportunity

The global bra-market constitutes the biggest share of 66.1% of the lingerie market - expected to reach \$27.6 bn by 2024 from \$14.6bn in 2019. Actual consumption is about 1.15bn units sold in 2017.

### The solution

This reality represents positive opportunities for Brarista to develop a breakthrough B2B2C that enables bra-wearers to determine their size and shop for the correct bra fit across brands and styles - using their mobile devices' cameras.



# Meet Debo Harris

**Founder  
TheConfidenceVault**

**Stage: Pre-Seed/Idea  
Investment required: £150,000**

[LINKEDIN PROFILE](#) ➤



[WEBSITE](#) ➤



## About Debo

Women are still suffering from the gender pay gap. Covid and the resulting recession have not been kind to women. And it is worse for women of colour. After reading Civil Engineering I chose to find out how businesses get built and stay up by becoming a chartered accountant and auditor in financial services.

After a career in corporate finance I am now a strategic advisor to board level executives I have volunteered teaching financial literacy, but with the current gender equality in pay and unconscious bias against women for recruitment, every day meetings and appraisals there is little chance that the dial on gender equality will move adequately in my lifetime. Another alternative to support women financially has to be created. In November 2019 I launched a coaching service to help unapologetically ambitious women meet senior leaders in their dream careers for sponsor-mentoring.

## Elevator pitch

The confidence bank gives women aged 22 - 29 and older women aged 45 and over the opportunity to share their goals for sustainability, social impact and personal core values.

### The problem

Women are paid on average 23% less than their male counterparts. With Women of colour in both the UK and USA having to work nearly 12 months to earn as much as their white male counterparts do in a year, the old adage of 'working twice as hard, for half as much' has never been more true.

### The opportunity

Monzo leads the challenger banking market in the UK, when looking at its share of monthly active users (MAU). It has grown its share of the market from 35% in April 2018 to over 50% by November 2019, taking market share from Starling bank and Revolut. The overall market size however also still increasing. Global downloads of banking apps continues to rise, being at 4.5million by Sept 2019.

## The solution

The TCB first asks members to select their core values, causes of interest and their savings goals. Then, members just live their lives as usual. Roundups and top up amounts are used to create an emergency savings, investment funds and ethical cause donations.

The TCB first asks members to select their core values, causes of interest and their savings goals. Then, members just live their lives as usual. Roundups and top up amounts are used to create an emergency savings, investment funds and ethical cause donations.

The women can access more and more products as they build their social-banker 'points' by regular savings, building their emergency funds and successfully completing 'levels' of learning through gamification (like Animal Crossing, but for their financial future, not a game avatar)



# Meet Uddhav Vaghela

**CTO**  
**VUI Diagnostics**

**Stage: Seed/Prototype**  
**Investment required: £500,000**

[LINKEDIN PROFILE](#) ➤



[WEBSITE](#) ➤



## About Uddhav

As medical students, both co-founders witnessed first-hand the inadequacy of eye care delivery in the community, recognising the challenges posed by the current generation of retinal imaging tools.

Faced by diagnostic uncertainty and subjective clinical decision-making, clinicians experienced 'fear' when using the ophthalmoscope, over-referring to avoid risking a patient's eyesight. By contrast, for patients, we encountered cases where delayed or misdiagnosis in primary care had resulted in irreversible sight loss. As budding MedTech innovators and colleagues, we combined our software and hardware skills, and shared passion for this problem to deliver a simple, affordable and accurate solution.

## Elevator pitch

VUI is an award-winning company, collaborating with world-class clinicians and institutes: Imperial College London, Imperial College NHS Trust, Royal Free London and the Macular Society. Current tools are underused due to being complex, inaccurate and high cost. Our handheld device and software can enable rapid retinal imaging by anyone, anywhere. At an affordable price, our solution is designed to integrate into primary care, with our target customers being General Practice and Pharmacy Self Diagnostic Services.

### The problem

Visual impairment and blindness affects 1.93 million people in the UK. Globally, the World Health Organisation (WHO) estimates that 285 million people suffer from visual impairment, of which 80% is avoidable through early diagnosis.

### The opportunity

The ophthalmic diagnostic market is prime for innovation, with the total addressable market having a CAGR of 4%. In the UK, France and Germany each primary care consulting room will be equipped with a manual ophthalmoscope – however, less than 48% of clinicians utilise these devices.

## The solution

By allowing earlier and easier detection of eye diseases in primary care, ViewEye aims to enhance opportunistic community retinal screening to promote timely patient accessibility to specialist eye care services.

Through a novel digital hardware and software symbiosis, our plug-and-play device can acquire a single ten times larger field-of-view retinal image than the manual ophthalmoscope, at five times the speed. By developing the device from the bottom-up to maintain low manufacturing and component costs, we will be able to offer fundus camera equivalent functionality, at a fraction of the cost. This combination of affordability, user-friendly design and high quality imaging, can optimise the current workflow for primary care physicians. By empowering allied health professionals to overcome the current pain point of retinal imaging, ViewEye can facilitate a shift in focus to retinal image analysis for accurate diagnosis and effective patient management.





# Meet Mohammed Al Qaraghuli

**Director**  
**SiMologics**

**Stage: Pre-Seed/Prototype**  
**Investment required: £200,000**

[LINKEDIN PROFILE](#)



## About Mohammed

Mohammed brings over 10 years' experience in the pharmaceutical field, having conducted antibody and protein engineering research in leading universities (Aberdeen and Strathclyde) and biotech companies (ImmunoSolv, Scotia Biologics, and Elasmogen-pre spinout). He has successfully completed the BioCity Accelerator SPARK programme, and won the best customer discovery prize during the DEVELOP Programme. In 2018, he has participated and selected as a finalist in various entrepreneurial competitions like Pitch Perfect competition at BioDundee, Converge Challenge (KickStart), and Scottish EDGE-13 (Wildcard), and has been awarded a £45,000 prize during the Scottish EDGE-14 competition (2019). SiMologics won The Most Promising Technology Prize through Mohammed's participation at the BioVale Innovation Biocamp 2018 (BioBase4SME Network-North-West Europe). Furthermore, he has completed the Rising Stars programme of the University of Strathclyde (Sep 2018-Feb2019), and the RBS Entrepreneur Accelerator programme (April 2019-October 2019). He is currently an ambassador for Strathclyde Entrepreneurial Network.

## Elevator pitch

SiMologics is a startup biotech company that designs enhanced biotherapeutics. We have created a platform to conjugate gold nanoparticles (AuNPs) to biomolecules called antibodies. These conjugates will be used as photothermal therapies to treat Head and Neck cancer (HNC). These therapies can burn cancer cells and treat cancer in an effective and non-invasive way.

### The problem

SiMologics optimises the conjugation of biomolecules called antibodies to gold nanoparticles using a novel linking methodology. Our ultimate aim is to use these conjugates as photothermal therapies to treat cancer in an effective and non-invasive way.

We are initially focusing on treating Head-and-Neck cancer (HNC), which affects over 600,000 people annually. Various factors can trigger HNC, such as smoking, alcohol consumption, and repetitive viral infections. HNC is currently treated by combining radiotherapies and chemotherapies that are

well-known for their severe side effects. Whilst the currently approved biotherapies are specific, but effective in only

10-20% of patients. So, there is an unmet clinical need for new treatments against this disease.

### The opportunity

According to Grand View Research, the global HNC market was valued at ~£600 million in 2016. The market is projected to grow at a CAGR of 9.4% through the forecast period, culminating in global sales of £1.1 billion in 2022.

SiMologics will address the HNC market that is expected to exceed £1.1 billion by 2022. Once we develop our proof-of-concept model, we will seek co-development collaborations with other biopharmaceutical companies to develop our therapies.

### The solution

SiMologics photothermal therapies are comprised of gold nanoparticles attached to specific sites of antibodies, which deliver them right to cancer cells. Then, upon exposure to laser light at a specific wavelength, the gold nanoparticles convert the absorbed light to heat, which burn cancer cells, and treat cancer.



# 2017 INNOVATION CHALLENGE WINNERS



WINNER

## **Amit Pate** Snaptivity

Snaptivity is a Smart Stadium Technology that drives engagement and increases sponsorship revenue at live sporting events by capturing candid emotions and reactions of fans.

[www.snaptivityapp.com](http://www.snaptivityapp.com)

WEBSITE >



RUNNER UP

## **Syed Ahmed** Savortex

Savortex has built the world's first IoT (Internet of Things)-enabled messaging hand-dryer to transform corporate washrooms into smart spaces.

[www.savortex.com](http://www.savortex.com)

WEBSITE >



RUNNER UP

## **Joyeeta Das** Gyana

Gyana is a self-service data science platform that enables insights around locations and people using big data and artificial intelligence technologies.

[www.gyana.co.uk](http://www.gyana.co.uk)

WEBSITE >





## 2018 INNOVATION CHALLENGE WINNERS



WINNER

### **Olivia Ahn & Aaron Koshy** Polipop

Polipop makes the markets first safely flushable and biodegradable sanitary products.

[www.polipop.co.uk](http://www.polipop.co.uk)

WEBSITE >



RUNNER UP

### **Rotimi Alabi** RAB-Microfluidics

RAB increase uptime by diagnosing early failure in heavy rotating machinery. Their invention downscaling whole laboratory protocols on to a glass microchip is innovative and permits a potentially disruptive offering.

[www.rab-microfluidics.co.uk](http://www.rab-microfluidics.co.uk)

WEBSITE >



RUNNER UP

### **Ellenor McIntosh & Alborz Bozorgi** Twipes

Twipes are the world's only truly flushable wipes! 100% dispersible in water within 3 hours, unlike traditional "flushable" branded wipes that take 3-10 months.

[www.twipes.eu](http://www.twipes.eu)

WEBSITE >





# 2019 INNOVATION CHALLENGE WINNERS



WINNER

## Fahim Pour Pukket

Pukket provides a universal loyalty point program where everyday people collect points for sharing their photos/experiences of their favourite brands on social media. These points are then redeemable for vouchers/products.

[www.pukket.com](http://www.pukket.com)

WEBSITE >



RUNNER UP

## Harvinder Power Motics

Motics will solve the problem of low adherence in physiotherapy through creating a more engaging approval that will encourage physical movements as well as emulate muscle activity. The current method of providing suggested movement to regain motor function does not motivate patients to persevere with their physiotherapy programme.

[www.motics.me](http://www.motics.me)

WEBSITE >



RUNNER UP

## Simon Ighofose PyroGenesys

PyroGenesys Ltd is a UK-based, bio-renewables technology provider.

[www.PyroGenesys.com](http://www.PyroGenesys.com)

WEBSITE >



RUNNER UP

## Olunkule Kayade Statmetrix

Statmetrix use AI technology to automate the collection of player performance data for football clubs.

<https://statmetrix.co>

WEBSITE >





# Meet Samit Biswas

**Founder & CEO**  
**Advatech Healthcare Europe Ltd**

**Stage: Seed/Paying users**  
**Investment required: £2,000,000**

[LINKEDIN PROFILE](#) ➤



[WEBSITE](#) ➤



## About Samit

Samit Biswas is a graduate in Zoology from Burdwan University, MBA in International Business from IIFT. He has 18 years of in-depth knowledge of the Healthcare market & worked in various MNC's across the country, as well as in-depth knowledge of the health care industry since April 1997 worked various MNC's in Pharmaceuticals, Human Biologicals, and Medical Device Industry.

He worked in Glaxo Smith Kline Pharmaceuticals (1997-2005), Johnson & Johnson (2005-2009), Smith & Nephew healthcare (2009-2010), Medtronic (2010). Samit also associated with World Scouting and a member of Rotary International & Good Will India Mission - an NGO to help needy people to get the medical treatment. Samit Biswas has won several National & International Awards for Social Works & commitments towards society.

## Elevator pitch

Hippo Mobility is the UK's best technology-driven clean, hygienic, cost-effective transportation services for the disabled, elderly people and non-emergency patients.

It also helps the elderly and disabled community to move freely and stay healthy.

### The problem

- 999 and NHS services are overloaded
- Patients are waiting long (sometimes more than 24 hours) after discharge from the hospital for transportation service
- Most of the GP surgery and clinics have a parking challenge and patients miss appointments due to proper and timely transportation
- No dedicated branded, clean, hygienic, safe and cost-effective nationwide wheelchair access vehicle services
- No dedicated services for Dialysis and Chemotherapy patient

### The opportunity

- More than half a million peoples over 90
- 13.37 million peoples are disabled in the UK
- 2.5 million Cancer and 3 million kidney failure patients in the UK
- Total NHS medical staff 709864 (NHS 2015), 7400 GP Surgeries and 211 NHS Trusts  
Total market size is around £17.12 billion

### The solution

- HIPPO Mobility is the First branded nationwide Wheelchair Access Vehicle (WAV) services
- Medically trained drivers and staff
- Fixed and transparent price. No Surcharges
- Clean hygienic and standardize vehicles
- 24\*7 dedicated FREE phone
- Mobile application and wearable contactless device for tracking, vital health statics and payment



# Meet Ike Okosa

**CEO**  
**eWorker Remote Limited**

**Stage: Pre-Seed/Paying Users**  
**Investment required: £1,500,000**

[LINKEDIN PROFILE](#) >



[WEBSITE](#) >



## About Ike

The team is led by CEO, Ike Okosa, a seasoned entrepreneur with over 15 years UK experience in business and outsourcing. In the UK, Ike had experience setting up online print, digital marketing & IT company. He is passionate about sales and partnerships.

After visiting Nigeria in 2015 and successfully working with a team of local developers, he moved to Lagos and started eWorker to provide opportunities and training to talented developers in Africa.

In August 2017, Ike was inducted on to the Cisco UNITes Networking Academy as an Advisory Board member and has helped the Academy open a number of IoT Centers across Africa.

## Elevator pitch

eWorker helps companies hire top distributed engineering talent with Africa's top software developers. Based in the United Kingdom, eWorker has a talent pool of over 1000 pre-screened developers in Nigeria, Kenya, Ghana, South Africa, Egypt, Morocco, Rwanda, Ethiopia and Uganda.

eWorker engineers are available as full-time or contracted remote developers for leading technology companies around the globe.

### The problem

There is a global software engineering talent shortage! In western countries, 40% of employers cannot find qualified tech talent. Africa has the largest pool of untapped talent in the world.

### The opportunity

- \$456 Billion global market.
- Shortage of 1 million technology jobs will go unfilled by 2020, according to a report by Microsoft

### The solution

eWorker is an evidence based senior engineer hiring platform. eWorker is an exclusive community of top tech professionals in Africa.

Employer and recruiters can now quickly access a pool of highly sought after engineers who have been ID verified and have been accessed on: technical skills, communication skills, cultural fit, psychometric and remote work ability.

The work place has changed and the future of work is here. Companies will no longer return to the old normal. Physical offices will continue to shrink, whilst teams continue grow. Times have changed and teams will be forever distributed.

Africa has an a mass of untapped tech talent. The problem is, many companies don't know where to start, who to trust or the capabilities of African talent (the media hasn't done a good job in telling the African tech story).

eWorker, is the bridge. We are a UK company with our feet firmly entrenched in the African tech ecosystem. We have a satellite presence and team members in top tech capitals Lagos, Ghana and Kenya. With eWorkerPay, companies can now pay contractors or employees in Africa from anywhere in the world.



# Meet Faisal Ghani

**Founder & Director  
SolarisKit Ltd**

**Stage: Seed/Launched  
Investment required: £150,000**

[LINKEDIN PROFILE](#) >



[WEBSITE](#) >



## About Faisal

Over the last 15 years I have been working in the field of solar energy as a mechanical engineer focused on low carbon heating. I was drawn to this field for a number of reasons but mainly from my technical interest in the underlying science and due to environmental concern. I was personally motivated to develop technology that harnessed solar energy to meet this demand while mitigating carbon emissions. I began my career working for large companies such as Rheem Australia and Dux Hot Water where I worked on the design and manufacture of solar energy systems.

I successfully introduced multiple systems into the market which generated more than £6M in revenue. As my technical interest grew in the field, I went on to complete my Master of Engineering and Doctor of Philosophy degrees specialising in intelligent control and advanced solar collector technology respectively. I published a number of journal papers in leading international journals which eventually led me to a role within academia. I have spent the last five years working for Heriot-Watt University, carrying out research into solar technology and teaching renewable energy engineering.

## Elevator pitch

SolarisKit has developed the world's first flat-packable solar thermal collector specifically for wide-spread implementation into the developing economies. We have focused on developing affordable clean energy technology to increase access to energy while reducing global carbon emissions. With heat accounting for 40% of energy related carbon emissions, solar thermal technology can be defectively used in regions like Africa, SE Asia, and Latin America to provide clean energy. Our solution is low cost and easy to transport thanks to its flat-pack design and simpler to install.

### The problem

Approximately 50% of global energy is consumed to generate heat, over 70% of which is still being met using fossil fuels. Meeting heating demand is consequently a significant contributor to the production of global greenhouse gas emissions.

### The opportunity

Due the current COVID-19 pandemic, SolarisKit will focus on the UK renewable heating market. Following traction in this market and global economic recovery, we will then enter the solar hot water market in the developing economies.

### The solution

SolarisKit has developed the world's first flat-packable solar thermal collector, a device which can be self-assembled and used to convert sunlight into hot water for heating. Due to its unique flat-packable design, the device is considerably cheaper to manufacture and transport (like an IKEA product) compared to incumbent solar thermal technology. The collector is based on a novel prismatic geometric design which allows it to be simply placed on the ground or a flat roof to operate making it ideal for flat-roof buildings common in many equatorial countries.



# Meet Lincoln Lee

**Co-Founder  
RiceInc Ltd**

**Stage: Seed/Launched  
Investment required: £50,000**

WEBSITE



## About Lincoln

As two recent graduates of University College London, co-founders Kisum Chan and Lincoln Lee founded Rice Inc, a social enterprise that aims to reduce the loss of rice during harvest by providing farmers with industrial dryers and storage facilities. Growing up along the Malaysian peninsula, the Singapore Strait, and the South China Sea with a passion for sustainable ecosystems, the two saw that Southeast Asia has a dire waste problem with financial exclusion of the farmers that produce the universal staple to most, if not all Southeast Asian cultures: Rice.

Informed by their transregional upbringing, they met at UCL, and decided to tackle this issue through their own social enterprise, Rice Inc, with a strong belief that humanity's biggest challenge to environmental empowerment is changing current infrastructures to systems that have lower carbon emissions, and are ultimately sustainable for future generations.

## Elevator pitch

Rice Inc is an award-winning social enterprise that is building the world's first global social impact rice brand. We source quality rice from vulnerable communities and reinvest profits to build a zero waste, carbon free and ethical supply chain for our farmers.

### The problem

The process of rice farming can be broken down into three subsections: pre-planting preparation, planting and maintaining, and post-harvest processing. During post-harvest processing, farmers in Southeast Asia struggle to meet seasonal harvest quotas due to a flawed, post-harvest global supply-demand chain. The root cause of this waste is the bargaining power imbalance that exists within the rice industry. In most rice producing landscapes, rich millers exploit rice farmers by offering farmers low prices for their crops.

### The opportunity

Through our interviews, we learned about the profiles of our two main customer segments and identified how Rice Inc may effectively address their needs: (a) Farmers who Sell Wet Paddy, and (b) Farmers who Practice Sun Drying.

Both key markets need immediate financial empowerment.

There are over 245 villages that are currently under the supervision of the Letpadan township and most of these villages have the same existing demographics and needs. This makes townships an ideal target for scale as villages are already used looking at the township or leadership or support to improve their livelihood.

The township is the home to 170,000 farmers which is a serviceable and obtainable market. Currently, we are operational in 23 villages in Myanmar with around 170 farmers.

### The solution

Rice Inc addresses post-harvest challenges faced by farmers in Southeast Asia that directly affect their ability to meet seasonal quotas due to a flawed, global supply-demand chain. We provide economic empowerment to smallholder farmers in Southeast Asia by increasing their earning potential through sustainable technologies.





# Meet Jeroo Doodhmal

**Founder  
Pip and Henry Pvt. Ltd**

**Stage: Angel/Prototype  
Investment required: £150,000**

[LINKEDIN PROFILE](#) >



[WEBSITE](#) >



## About Jeroo

As a mother, I am only too familiar with the number of products a household with kids consumes. I saw this particularly with shoes.... my daughter outgrows them every 3-4 months, they're still in practically perfect condition by the time she outgrows them, and options for recycling/donating/re-selling are very fragmented.

I researched this area further and found that 90% of discarded fashion items (including shoes) end up in landfill, leaching terrible chemicals into the ground for hundreds of years thereafter because of the materials they're made of.

This is a real pity - given eco-friendly materials are available, and the lifetime of children's shoes can be significantly increased beyond the average we currently see before they are disposed of (through re-use and re-purposing of the materials in shoes).

While there are a few companies making good strides in the adult fashion sector, nobody is doing this well for children's footwear. It was this gap in the market that led me to form Pip & Henry, my brand selling eco-friendly shoes for children.

## Elevator pitch

The raison d'être for Pip and Henry is to create beautiful, high quality products from renewable materials and take true responsibility for providing parents eco-friendly choices when buying products for their children.

### The problem

Kids outgrow shoes every 3-6 months up to the age of 10 years. The average child owns 5 pairs of shoes at any given point of time. Which means a every kid of average goes through at least 125 pairs of shoes before they turn 10 years old. Recycling and re-selling options are fragmented, leading to 90% of fashion items being sent to landfill. The UK alone sends 300 million pairs of shoes to landfill every year - most still in good condition and fit for re-use.

### The opportunity

The children's footwear market in the UK alone is worth £1.7bn.

### The solution

Pip and Henry takes on the gamut of challenges posed above head-on, closing a clear gap in the children's footwear market and delivering a proposition that incorporates:  
The use of truly eco-friendly

materials across all of our products. Customisable designs that encourage multi-use of the same base product (reducing the number of shoes every child needs to own at any given point in time). Incentivised recycling once products can no longer be used by the family.

We have developed an initial financial model and business plan, and estimate that in the UK alone, we will achieve an annual revenue of £1,600,000 (which is .009% of the UK footwear market value) within 5 years, with a 2 year break-even point. We have estimated £500,000 of funds raised from grants, impact investors and VCs over this 5 year period.

We see the market for sustainable fashion products growing (customers are spending on average 20% more YOY on sustainable fashion). Brands like Allbirds and Rothy's which were set up in 2016 for sustainable adult footwear have seen revenues of over \$150m within 2 years and growing.



# Meet Bharat Lad

**CEO**  
**DadShed (trading as Roomagree)**

**Stage: Seed/Users**  
**Investment required: £125,000**

[LINKEDIN PROFILE](#) >



[WEBSITE](#) >



## About Bharat

Bharat Lad has been thinking about this since 1998 prior to the existence of the internet in its current form whilst living in London and renting out a property in Manchester. Even though an Agent had been hired, too many mistakes were being made to the detriment of the tenant, wasted time for all suppliers and cost to himself. The Agent was having items repaired even though they were under warranty, repairs were not visible to all parties transparently and call out charges were being administered as no information was available to repair people prior to their visit.

## Elevator pitch

DadShed exists to simplify property management for tenants or homeowners in collaboration with a marketplace of real estate experts starting with residential property developers. We are simplifying property management for homes across the world with a platform and connected App.

### The problem

DadShed is about property data that is being leaked, lost, misplaced, forgotten or simply thrown away! The consequence is that property management is chaotic, time-consuming, labour intensive and usually requires somebody involved to travel to a site.

DadShed champions tenants and homeowners, working with the professionals involved in the real estate sector by creating a community of interest around a building. This platform is more than about digitizing and we are starting the journey with residential property developers.

### The opportunity

DadShed is piloting with 10 property developers and in the UK overall there are around 1,000, with an estimated 1m worldwide and there are at least 3bn properties that all need managing.

## The solution

We are creating a single page app that will have the simplicity similar to the use of Instagram, with no more than three clicks to tag a property fixture or fitting and to add detailed information such as purchase price. Operationally, the DadShed platform will work like Trello in a benign way, providing no advice and allowing experts to integrate further functionality. DadShed will have a personality similar to Waze where users will collaborate and be rewarded to resolve management issues. Finally, DadShed will build on the peer-to-peer marketplace, something proved by eBay, by integrating data to assist with purchasing

In effect, DadShed is enabling the digital twinning of buildings for the purpose of property management and leveraging the data generated for marketplace services. Our initial clients are property developers that are still physically printing homeowner manuals and we are digitising this information into a platform business with a connected occupier app.

# THANKS AND ACKNOWLEDGEMENTS

Judging such an amazing collection of innovators is no easy task. This year's challenge saw increase in number of applications as well as a great diversity of ideas in all four categories.

We are fortunate to have 13 exceptional individuals to judge this year's applicants. The judging panel was made up of investors, industry experts and entrepreneurs that agreed to review the first stage of the competition. This included online reviews of all 114 applications and being on the judging panel on the semi-finals pitch day.

## Our semi-final judges:

**Nick Wright:** Digital Catapult

**Lina Huertas:** MTC

**James Johnson :** Cummings

**Jodie McNally:** EY Foundation

**Hayley Colleen:** ClearlySo

**Aditi Shah:** School Space

**Anthony MA:** Accenture

**Asheesh Melani:** Tripifini

**Tara Sabre:** Shell Foundation

**David Villa-Clarke:** Aleto Foundation

**Paul Forster:** SetSquared

**Vassilis Georgiadis:** UCL

**Anna Contaxaki:** Eaton

# THANKS TO ALL OUR INNOVATION CHALLENGE FINALISTS

Over the last 4 years, we have had the privilege of meeting and supporting hundreds of innovators, 40 + of whom reached the challenge finals & semi - finals.

Thank you for taking part. Without you and your ideas this challenge would not be as inspiring as it has become.

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RAB-MICROFLUIDICS R&D LTD THE CHEEKY  
PANDA THINGTRAX TWIPES VR:CALM POLIPOP  
ZINGR LTD ENERGIMINE PYROGENESYS LTD  
MOTICS STATMETRIX LTD NXSTEPS GROUP LTD  
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“INNOVATION DOESN'T EQUAL SOCIAL GOOD,  
BUT SOCIAL GOOD CAN BE ACCELERATED BY  
INNOVATION... PROVIDED THAT PURPOSE IS AT  
THE HEART OF THAT INNOVATION.” - SOCIAL  
INNOVATION SUMMIT IN SAN FRANCISCO

