MEET THE 13 INNOVATORS
CREATING BETTER IDEAS
FOR A BETTER WORLD

2019
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.

As we embrace the new digital world 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 individuals. This makes diversity a critical factor to bring new solutions, breakthrough technology and disruptive businesses to market.

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
In its 3rd year, the 2019 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 of its kind. This year’s theme, ‘Better Ideas for a Better World’, focuses on technologies, products, services or business models in 4 key areas: Industry 4.0, Social Innovation, Healthcare & Wellbeing and Sustainable Futures.

Our thanks to Cummins, Digital Catapult, Johnson & Johnson 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 2019 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

To access more information on the innovation challenge, click the button below.

**PRIZES**

<table>
<thead>
<tr>
<th>£5,000</th>
<th>£40,000</th>
<th>£100,000</th>
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<tr>
<td>CASH PRIZE FOR THE CHALLENGE WINNER</td>
<td>WORTH OF BUSINESS SCHOOL SCHOLARSHIPS</td>
<td>WORTH OF CORPORATE MENTORING</td>
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THE FOUR CHALLENGE CATEGORIES

HEALTHCARE & WELLBEING
SPONSORED BY JOHNSON & JOHNSON

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
6 / Kapsule
8 / Motics
10 / Tuli Health

INDUSTRY 4.0
SPONSORED BY CUMMINS

Ideas for the future that utilise new technologies like AI, blockchain, VR and many more.

Click the innovator you wish to view
12 / Aries VR
14 / EnergiMine
16 / NxSteps
18 / Statmetrix
SOCIAL INNOVATION
SPONSORED BY DIGITAL CATAPULT
Ensuring that the benefits of social and economic development are reaching everyone in society.

Click the innovator you wish to view

22 / Maji
24 / Pukket

SUSTAINABLE FUTURES
SPONSORED BY ACCENTURE
Creating innovative technologies that address environmental challenges and promote sustainability.

Click the innovator you wish to view

26 / Loch
28 / PyroGenesys
30 / SpacePlatform
32 / Waterwhelm
“Our vision is to enable every patient across the world to have the same peace of mind about the quality of their medicines that we have here in the UK.”
MEET DAVID CHEN

CO-FOUNDER & CEO, KAPSULE

CATEGORY: HEALTHCARE & WELLBEING
EDUCATION: QUEEN MARY UNIVERSITY OF LONDON
LOCATION: LONDON / WEBSITE: WWW.KAPSULE.LIFE

ABOUT DAVID AND HANNAH

Founders David Chen and Hannan Hashmi are childhood friends who had parallel lives through primary, secondary, sixth form, university and industry.

They both independently encountered the issues posed by falsified and sub-standard medicines in emerging markets, through talks at international conferences and by working on the ground in hospitals, respectively.

The problem of falsified and sub-standard medicines was getting worse, especially in sub Saharan Africa.

Even though the pharmaceutical market had experienced exponential growth, 1 in 6 medicines in circulation are substandard.

5 years later, Kapsule was founded.

“REALISING THAT COUNTERFEITING WORSENED DURING OUR HIATUS FROM THE HEALTHCARE INDUSTRY, WE KNEW WE HAD A UNIQUE PERSPECTIVE AND ABILITY TO FIX IT. AS CHILDHOOD FRIENDS, WE COMBINE OUR COMPLIMENTARY SKILL-SETS, OUR SHARED PASSIONS IN HEALTHCARE AND THE LAW, WITH A DRIVE TO CREATE AN IMPACT ON A LARGE SCALE.”

ABOUT KAPSULE

Kapsule has identified a coordination gap between local governments and the private sector, as well as limited accountability for actors and limited infrastructure for high-tech solutions.

Kapsule’s solution is targeting the supply-chain actors specifically through coordination between the patients, governments, and pharmaceutical manufacturers, thereby making the middle-people accountable for the first time.

Kapsule built a service that can track and trace drug sources and verify that only authentic drugs are handed over to authorised parties at each point of transfer. This blockchain-powered supply-chain tracking service allows for a clear and solid audit trail with near real-time visibility.
“We’re honoured to be a finalist at an amazing competition promoting innovation through diversity, a quality we strive to achieve at Motics.”
MEET HARVINDER POWER

FOUNDER, MOTICS

CATEGORY: HEALTHCARE & WELLBEING
EDUCATION: IMPERIAL COLLEGE LONDON
LOCATION: LONDON / WEBSITE: WWW.MOTICS.ME

ABOUT HARVINDER

Harvinder’s father suffers from Sciatica - a common condition affecting millions around the world, causing chronic leg pain. It requires daily physiotherapy to alleviate pain symptoms, but the problem is that the experience is not engaging.

He received an A4 sheet of paper with a list of physiotherapy exercises, but never engaged and to this day still suffers with leg pain daily.

Harvinder noticed that his father enjoyed playing on the Nintendo Wii and wondered if there was a way to make it more useful – providing an experience which engages patients whilst also speeding up recovery.

From there, he discovered that the problem was not just exclusive to patients with Sciatica, but common to all patients requiring physiotherapy – up to 10 million a year in the UK alone.

“WINNING MSDUK INNOVATION CHALLENGE WOULD PROPEL US TO NEW HEIGHTS - HELPING US TO ACHIEVE OUR MISSION OF ENABLING EFFECTIVE, ENJOYABLE PHYSIOTHERAPY FOR EVERYONE.”

Motics was born in 2018 with the mission of empowering everyone to enjoy effective physiotherapy at home.

ABOUT MOTICS

The device is a compression sleeve with sensors that measure muscle function and stimulate muscle activity. These are combined with a gamified approach which incorporates physiotherapy movements whilst engaging users, improving adherence, which has been well documented in scientific literature. This solution enables both improved adherence, and the ability for physiotherapists to gain improved insight into muscle function compared to current functional assessments.

Motics ran user testing for over 12 weeks, and demonstrated a 400% improvement in engagement, a 250% improvement in muscle strength from baseline, 50% reduction in recovery time, and 35% reduction in pain symptoms, which granted them a partnership with Imperial College London.

To date, Motics have 15 physiotherapy clinics onboard (in London and Dublin) that have agreed to trial the product with real patients as part of a paid pilot programme.
“Language will no longer be an issue and medical information will be transferred seamlessly, with more effective communications for patients, doctors and all health care professionals.”
MEET
JIAWEI LI

FOUNDER & CEO, TULI.HEALTH

CATEGORY: HEALTHCARE & WELLBEING
EDUCATION: UNIVERSITY COLLEGE LONDON
LOCATION: LONDON / WEBSITE: HTTPS://TULI.HEALTH

ABOUT JIAWEI

Jiawei grew up in China and moved to the UK when she was 12, without any knowledge of English. Learning to speak English was a huge challenge. She had the first-hand experience and frustration of being unable to communicate with other people.

Whilst she was studying medicine at university, she utilised her medical knowledge and bilingualism and helped many hospitals, refugee centres and academic institutions with medical translation work. Many patients were not able to understand the medical information given to them due to the language barriers, leading to patients not receiving the care and treatment they need.

The problem is a shortage of medical translators. General translators do not have the expertise and specialist translators are often very expensive.

“IT’S MY HONOUR TO BE SHORTLISTED AND GIVEN THE OPPORTUNITY TO PROMOTE MY IDEA TO A WIDER AUDIENCE, TO SHOWCASE THAT WITH TECHNOLOGY, LANGUAGE WILL NO LONGER BE A BARRIER FOR CROSS-BORDER HEALTHCARE ACCESS. WINNING THE COMPETITION WOULD BE A HUGE ENCOURAGEMENT TO US, AS IT WOULD SHOW THAT NO MATTER HOW CRAZY OUR IDEAS ARE, THERE ARE PEOPLE WHO SHARE OUR VISION.”

This is when Jiawei realised that there is a huge need for high quality and more affordable medical translation.

ABOUT TULI.HEALTH

Formerly known as SmartLingual, tuli.health was born out of Jiawei’s vision to break down the language barriers in medicine, allowing easy exchange of medical information. Jiawei is looking to see how integration between human medical experts and machine AI can deliver the precise and affordable translation to everyone.

At the moment, there is a huge demand for medical translation between China and the English-speaking sphere.
“I have always been attracted to the idea of flying since I was young. My dreams, drawings, entertainment and thoughts were always filled with these ideas.”
MEET
KENNEDY MASHANDA

FOUNDER, ARIES VR

CATEGORY: INDUSTRY 4.0
EDUCATION: UNIVERSITY OF HERTFORDSHIRE
LOCATION: HATFIELD, HERTFORDSHIRE / WEBSITE: WWW.ARIESVR.COM

ABOUT KENNEDY

Kennedy was raised between Zimbabwe and the UK. He quickly learned of problems that both international and home students face in acquiring hands-on skills and work experience.

Because of a lack of practical training in higher education, employers incur heavy costs and spend up to 6 months training recent graduates to learn basic tasks such as tool usage or practicing health and safety.

Students from underdeveloped countries are even more disadvantaged because they do not have access to resources that enable them to practice hands-on skills.

“FOR ME, MSDUK HAS LITERALLY BEEN A LIFE-CHANGING OPPORTUNITY. WINNING THE COMPETITION WILL HELP ARIES VR GAIN TRACTION AND BUILD THE RIGHT BOARD WITH PEOPLE CONNECTED TO THE AVIATION AND IMMERSIVE TECH INDUSTRY.”

ABOUT ARIES VR

Aries VR is a virtual reality pilot training software – the flight school of your dreams, in your backpack.

It allows pilots to become immersed in the cockpits of multiple aircraft and practice procedures through step by step visual, audio cues and take tests at the end of each exercise.

With VR training there is no need to book a venue, aircraft, organise the event or travel in order to start learning. The course is developed once, and anyone with a compatible VR headset can access it while in the comfort of their own home.
“To be able to leave a mark on an industry which affects virtually every human being on earth would be an incredible honour and an achievement, and the question for us at EnergiMine is, why can’t that be us?”
MEET IMRAN RAHIM

CMO, ENERGIMINE

ABOUT IMRAN

Imran Rahim is an experienced business development professional. He has broad experience in multi-million-pound public and private sector tenders and oversees the strategic roadmap for EnergiMine's growth plans, successfully bridging the technology and commercial arms of the company to ensure projects are executed in line with the company vision.

EnergiMine is committed to making the world of energy, more open, fair and transparent.

The current energy industry has fallen behind many industries, and without integrating new technologies and developments it will fall even further behind.

“ENERGIMINE’S REPUTATION IS FOR INNOVATION AND CHALLENGING NORMS. WE’VE NEVER BEEN AFRAID TO SHAKE THINGS UP, NOT FOR THE SAKE OF IT BUT FOR THE BETTERMENT OF THE INDUSTRY, AND ULTIMATELY THE PLANET.”

ABOUT ENERGIMINE

EnergiMine challenges the status quo, disrupting and decentralising global energy markets. How we achieve this is through the utilisation of intelligent technologies, in order to devolve power to all those who generate and consume energy.

EnergiMine’s platform EnergiCore, delivers reporting, analysis and customer service solutions by utilising artificial intelligence to perform the functions of a traditional energy broker faster, more accurately and with unique insights.

Traditional archaic systems which are slow and manual impact on the speed of service, accuracy of data and efficiency of processes. Also, there is a perceived lack of trust within the third-party intermediaries due to hidden costs from agents. Currently, any excess energy generated through renewable energy sources is sold back to suppliers, who then add a margin and re-sell at a huge profit.
“It’s great to be a finalist in a competition that champions diversity at its core and pitching with such high calibre semifinalist only emphasises the greater level of achievement we feel in making it to the finals of the MSDUK Innovation Challenge.”
MEET
ALECIA ESSON

FOUNDER, NXSTEPS

CATEGORY: INDUSTRY 4.0
EDUCATION: BRUNEL UNIVERSITY
LOCATION: WATFORD, LONDON / WEBSITE: WWW.NXSTEPS.CO.UK

ABOUT ALECIA

Alecia was born and raised in Jamaica until the age of 9 when she moved to the UK. She has 7 years of experience working on various design innovation projects with an MSc in Integrated Product Design from Brunel University.

Every year, between 65 and 80% of runners suffer an injury. Added to this, 45% of British people suffer what is termed as “gym-jury”. The push for people that often live sedentary lives to get fit leads to the uptake in high impact activities such as running, cross training and/or weightlifting with little to no training. This leaves people unsure of the right techniques and susceptible to injury.

“I REALISE NOW THAT I MIGHT FAIL, AFTER ALL, MOST STARTUPS FAIL, 90% IN FACT, BUT AS ONE OF MY AUNTIES PUTS IT “THAT SHOULD NOT BE SOMETHING TO FEAR, THAT SHOULD BE SOMETHING TO EMBRACE, IT SHOULD BE THE VERY THING THAT EMPOWERS YOU. IF WE DO NOT TAKE THE RISK AND TRY, THEN WE CAN NEVER REAP THE REWARD WHEN WE ARE SUCCESSFUL. I ALSO REALISED THAT REGARDLESS OF IF I FAIL OR NOT, I ALREADY HAVE BEEN SUCCESSFUL, BUT I WILL NOT FAIL.”

ABOUT NXSTEPS

Nxsteps is a powerful smart insole that does not just track your run but informs you about how your body performed during your run via our app and AI based voice coaching. Utilising sensor technology including pressure sensors that map weight distribution, speed and foot position, the insole can give granular insight into how the body is working biomechanically during an activity.

NxSteps stands for accessible, friendly activity monitoring that is scientifically backed and can be trusted to help customers improve their run performance as well as limiting opportunities for injury.

“I BELIEVE THAT THESE OPPOSITE LIFE EXPERIENCES HAVE SHAPED ME INTO THE PERSON THAT I AM TODAY.”
“The level of competition at the semi-final stage was very high as all the start-ups represented are solving important societal and industry challenges.”
MEET

OLUKUNLE KAYODE

MANAGING DIRECTOR, STATMETRIX

CATEGORY: INDUSTRY 4.0
EDUCATION: CASS BUSINESS SCHOOL
LOCATION: LONDON / WEBSITE: WWW.STATMETRIX.CO

ABOUT OLUKUNLE

Olukunle has over 7 years of finance and investment experience, working at a financial technology firm, helping clients to leverage financial data and technology to make better investment decisions.

Having the love of sports from a young age, he was intrigued about how data technology can be used in sports to help make better decisions about talent discovery and development.

Current football performance analysts that produce performance reports take up 50-60% of the time doing manual tasks such as collecting match data and video clips.

“OUR OBJECTIVE IS TO LEVERAGE OUR TECHNOLOGY TO DEVELOP AN ECOSYSTEM FOR TALENTED YOUNG ATHLETES TO BE DISCOVERED AND DEVELOPED MORE OBJECTIVELY.”

ABOUT STATMETRIX

Statmetrix is developing a two-sided platform that firstly caters to the internal needs of performance analysts by helping them automate the collection of performance data of football players and providing them with insightful reporting that helps them develop training regimes to improve the abilities of players.

As more teams use the Statmetrix software for performance analysis automation, more data will be available for scouts who wish to identify the best talents from anywhere in the world.

The long-term mission of Statmetrix is to provide sports athletes the best chance of being discovered, and making it pro, and if that doesn’t work, to provide other options for these athletes including education and other training to give them valuable skill sets.
WINNER

AMIT PATE
SNAPTVITY

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

RUNNER UP

SYED AHMED
SAVOTEX

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

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
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

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

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
“I have always had a strong desire to make a positive contribution to society and used to contribute extensively to charitable activities both monetarily and in personal time.”
MEET
SAHIL SETHI

CEO, MAJI

CATEGORY: SOCIAL INNOVATION
EDUCATION: UNIVERSITY COLLEGE LONDON
LOCATION: LONDON / WEBSITE: WWW.MAJI.IO

ABOUT SAHIL

Sahil has worked at some of the largest pension providers in the world, including Fidelity, Willis Tower Watson and State Street Global Advisors.

Over time however, Sahil came across the concept of social enterprises, which struck a chord with his belief that businesses really hold the key to making wider, deeper and more sustainable impact.

Sahil has been in pensions for over 15 years and has closely seen the problems people experience when engaging with pensions. He wanted to deal with this problem and had the idea for Maji 4 years ago. Since then he has been refining the concept and building the base for it on a part-time basis.

“OUR MISSION IS TO HELP PEOPLE ACHIEVE FINANCIAL RESILIENCE AND FREEDOM, THROUGH ACCESSING, UNDERSTANDING, MANAGING AND GROWING THEIR PENSION POTS.”

ABOUT MAJI

In the UK, over 80% of people are not saving enough for their retirement and 1 in 5 have lost track of a pension, worth on average £13k. The number of under savers is set to grow to 20m by 2026, with other western nations facing similar levels of under-saving.

This low savings rate affects people’s quality of life both before and after retirement age: 40% of employees have money worries, and of those who are retired, 50% of those who have no additional income on top of the state pension. They say understanding what it’s like to be retired makes them wish they’d saved more.

Maji is the go-to pensions app that tracks your pension pots, tells you how much you need to save for retirement and helps you get there.
“Being a migrant from a Persian background puts a lot of responsibilities on my shoulders. There are many youths within the Persian migrant community who find it difficult to break into tech. With Pukket I can set an example for them and show the possibilities regardless of where people come from.”
MEET
FAHIM POUR

CEO, PUKKET
CATEGORY: SOCIAL INNOVATION
EDUCATION: ROYAL HOLLOWAY UNIVERSITY OF LONDON
LOCATION: LONDON / WEBSITE: WWW.PUKKET.COM

ABOUT FAHIM
Fahim moved to the UK in 2005. Within a few months of his arrival at the age of 16, he became fascinated by entrepreneurship.

Fast forward to 2019, he went from not knowing anything about privately owned businesses to founding 4 ventures of his own, as well as getting his masters and PhD in the field of entrepreneurship from University of London where he received Excellence Scholarships.

“WE NO LONGER WANT PEOPLE’S DATA, ATTENTION AND CONTENT ON THE WEB TO BE TAKEN FOR GRANTED FOR THE PURPOSE OF ADVERTISING. THE MOMENT WE GET BRANDS TO APPRECIATE THEIR CUSTOMERS AND REWARD THEM FOR THEIR ENGAGEMENT ONLINE, WE’RE SUCCEEDING IN OUR MISSION: REINVESTING THE ECONOMIC MODEL BEHIND THE WEB BY EMPOWERING PEOPLE TO BE THE SINGLE SOURCE OF TRUST, RECOMMENDATIONS AND REVIEWS ONLINE.”

ABOUT PUKKET
Pukket is on a mission to make the web a fairer place for everyone. Pukket provides a universal loyalty programme where people collect points for sharing their photos and experiences of their favourite brands on social media. These points are then redeemable for vouchers or products.

One of Pukket’s core strengths is the team behind the product. They are group of friends who work well together and deliver quickly as a team.
“I’m extremely excited to be part of this and it feels that you’re not alone out there trying to bring positive change to this world. It’s great there are institutions like MSDUK to support us along the way.”
ABOUT FRANCISCO

Francisco graduated with a BSc in Mechanical Engineering in Lima, Peru. He was immediately hired by a German engineering firm, Loesche GmbH, to work on plant engineering in Florida, USA. He learned a great deal about hardcore engineering and design but after five years he realised it was not his path.

Francisco started thinking about different ideas that would positively impact both people and the environment. He had a good number of projects but still had no idea of how to begin. He went on to study a Masters in Mechatronics at the University of Strathclyde and was awarded entrepreneur of the year.

“I WAS RESTLESS THINKING I WAS NOT MAKING ANY IMPACT IN THE AREAS THAT MATTERED TO ME. I HAD TO LOOK ELSEWHERE.”

ABOUT LOCH ELECTRONICS

Loch Electronics was born through a desire to revolutionise dishwashing. Hand washing uses 13 times more water than dishwashers. Washing dishes by hand wastes, just in Europe, 6.1 trillion litres of water and 92 TWh of electricity each year.

Dishwashing also causes more relationship distress than any other household task.

Most people live in small rented flats and are not allowed to do any plumbing work to install a dishwasher. It doesn’t matter if they can or can’t do any plumbing work, in most cases a full-size dishwasher would not fit in their kitchens and would not fit for the small amount of dishes they need to wash.

Loch Electronics has developed a range of personal dishwashers five times smaller than a full-size dishwasher and two and a half times narrower than a countertop dishwasher. The dishwashers can wash for two people an array of standard dishes and cookware including frying pans and cutting boards. Loch dishwashers can save 11.2 times water and 2.6 times electricity compared to washing by hand. Every 1000 dishwashers will save 234 tons of CO2 per year.

This project won first place at Iberdrola/Scottish Power Energy Challenge.
“Being an MSDUK Innovation UK Challenge finalist couldn’t have come at a better time for PyroGenesys. Just having the opportunity to reach out to such a distinguished audience is a prize in itself!”
MEET
SIMON IGHOFOSE

CEO, PYROGENESYS

CATEGORY: SUSTAINABLE FUTURES
EDUCATION: ASTON UNIVERSITY
LOCATION: LEICESTER / WEBSITE: WWW.PYROGENESYS.COM

ABOUT SIMON

Facing the prospect of a £10k pay cut and 6-monthly job reviews, Simon left a career in local government in 2010 to pursue a business venture in West Africa. He quickly realised however, that the entire Nigerian population lacked access to consistent, reliable, affordable electricity.

Having read an article published by two Aston University academics, showing how pyrolysis can convert cassava peel into diesel to run generators, Simon decided to enrol on the Chemical Engineering Masters degree at Aston University to further understand this technology.

Simon decided to form a company, developing an improved pyrolysis technology based on what he had learned whilst conducting research at the European Bioenergy Research Institute at Aston University.

“PROVIDING THESE OFF-GRID COMMUNITIES WITH ACCESS TO CONSISTENT, RELIABLE, AFFORDABLE ELECTRICITY WILL ENABLE THEM TO DEVELOP ESSENTIAL SERVICES THAT PROMOTE HEALTH, EDUCATION AND ECONOMIC GROWTH/PROSPERITY.”

ABOUT PYROGENESYS

Many rural communities in Sub-Saharan Africa lack access to electricity. Yet the crop waste they produce can be converted into renewable electricity, heat and smokeless solid fuels, using the PyroPower system developed by PyroGenesys.

Pyrogenesys secured a place on the Climate-KIC Stage 1 Clean-Tech 4 Acceleration programme in 2017 and this helped develop the initial business plan.

Simon is utilising his previous experience of managing a £4.5 million local authority grant programme, and experience of delivering a capital project at the Dow chemical plant in Barry, to ensure the engineering deliverables in this project are fully realised.
“As a finalist, I feel extremely proud of all the hard work we put in, and it is very encouraging to see that hard work, and our vision being recognised by people outside the space industry.”
MEET
ADIT SHAH
CEO, SPACE PLATFORM TECHNOLOGIES

ABOUT ADIT
Adit has worked at Airbus as aircraft structures integrator and engineer, as well as aircraft design, flight testing, repairs and maintenance, and bringing the knowledge and robust processes of the aviation industry into the space industry.

In 2017, Space Platform Technologies Ltd. was founded with the vision of enabling a simple and environmentally sustainable space. The founders, Adit and Stuart, both passionate about the space industry, had studied aerospace and astronautical engineering with an aim to establish themselves within the space industry.

“OUR PASSION AND VISION FOR SPACE PLATFORM TECHNOLOGIES IS OF SIMPLE, SUSTAINABLE AND ACCESSIBLE SPACE.”

ABOUT SPACE PLATFORM TECHNOLOGIES
Space Platform Technologies believe that simplicity and ease of access to space will breed innovation in the space industry and corresponding downstream service providers - low cost will enable innovation. Space Platform Technologies are providing ‘space as a service’ (SpaaS) for cubesat missions by providing end-to-end support to clients - from mission design to operation and data relay.
“The motivation behind founding Waterwhelm is that about a third of the world’s population lack access to safe, readily available water at home. The existing challenges in the water industry are mainly around small and remote communities.”
MEET
ALIREZA ABBASSI MONJEZI

FOUNDER, WATERWHELM

CATEGORY: SUSTAINABLE FUTURES
EDUCATION: QUEEN MARY UNIVERSITY OF LONDON
LOCATION: EDINBURGH / TWITTER: @WATERWHELM

ABOUT ALIREZA

The inspiration has been in development over the past 6 years of researching water science and engineering. The motivation behind founding Waterwhelm is that about a third of the world’s population lack access to safe, readily available water at home.

The existing challenges in the water industry are mainly around small and remote communities. This is due to the energy intensity of the processes involved in water/wastewater treatment and the lack of infrastructure in many countries to supply energy for these processes.

Waterwhelm has taken a transformative approach to present a self-powered solution by using the chemical energy available in sewage. Generally speaking, the human digestive system is about 25% efficient at converting the chemical energy present in food into output, the remaining energy content ends up in the sewage.

ABOUT WATERWHELM

Waterwhelm has developed a compact, modular and self-powered technology for the production of freshwater simultaneously producing biodiesel/biogasoline on large-scale or electricity on small-scale applications from wastewater.

A side-product of the process will be ash, used as a fertiliser, which can be sold to the market.

Waterwhelm has established a partnership with Veolia, one of the largest players in the global water market. A pilot unit is currently being built at Veolia’s Seafield Sewage Plant in Edinburgh.

Waterwhelm will tap into this vastly undermined bio-resource to facilitate a circular economy around sewage.

“PERSONALLY WINNING ONE OF THE BUSINESS SCHOOL SCHOLARSHIPS WILL BE EXTREMELY INVALUABLE AS IT ALLOWS ME TO ENHANCE MY BUSINESS DEVELOPMENT SKILLS IN TAKING WATERWHELM FORWARD AND REINVENTING WATER SUPPLY.”
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 were fortunate to have 13 exceptional individuals made up of investors, industry experts and entrepreneurs that agreed to review the first stage of the competition. This included online reviews of all 96 applications and being on the judging panel on the semi-finals pitch day.

Our semi-final judges:

Siddhi Trivedi
Beowulf Proof Works
James Johnson
Cummins
Asheesh Malaney
Tripifini
Nick Wright
Digital Catapult
Raam Shanker
Equitus Engineering
Deaneesha Govender
Intel
Jessie Coates
EY
Raj Gawera
Samsung Cambridge
Debbie Saville
Johnson & Johnson
Bao Tieu
UCL
Andy Ayim
Backstage Capital
Sid Narang
Thesqua.re
Anthony Ma
Accenture

Our judges for the 2019 final:

Brendan Raju
Corporate Indirect Purchasing, Africa Middle East, Cummins
Ray Lambe
Director of Programme Delivery, Digital Catapult
Debbie Saville
Johnson & Johnson
Theresa Harrison
EY
Nedra Dickson
Accenture
David Villa-Clarke
Director, DVC Wealth Management
Bao Tieu
Acceleration Manager for Entrepreneurship, UCL

Special thanks to David McQueen for running the pitch-training day for all the finalists, and helping them to perfect their pitch and prepare for the final.
THANKS TO ALL OUR INNOVATION CHALLENGE FINALISTS

OVER THE LAST 3 YEARS, WE HAVE HAD THE PRIVILEGE OF MEETING AND SUPPORTING HUNDREDS OF INNOVATORS, 30 OF WHOM REACHED THE CHALLENGE FINALS.

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

ENVIRUP LTD  WEALTHKERNEL  YOOMI SAVORTEX LTD  QUIT GENIUS (DIGITAL THERAPEUTICS LTD)  CERA  GYANA BRI-TEK TECHNOLOGIES  SNAPIFY LTD  OCTAVIAN IT  AUDIOWINGS LTD  ENVIRUP INSULATION SYSTEMS HELLO DAISY LIFE  MEDIXUS  MOTHER NATURE’S  RAB-MICROFLUIDICS R&D LTD  THE CHEEKY PANDA  THINGTRAX TWIPES  VR:CALM  POLIPOP  ZINGR LTD  ENERGIMINE  PYROGENESYS LTD MOTICS  STATMETRIX LTD  NXSTEPS GROUP LTD  MAJI  LOCH ELECTRONICS LTD  WATERWHELM  SPACE PLATFORM TECHNOLOGIES LTD  ARIES VR TULI.HEALTH  PUKKET  KAPSULE
INTRODUCING THE MSDUK ECOSYSTEM

MSDUK BRINGS TOGETHER INNOVATIVE AND HIGH-GROWTH ETHNIC MINORITY BUSINESSES (EMBs) WITH GLOBAL CORPORATIONS COMMITTED TO CREATING AN INCLUSIVE AND DIVERSE SUPPLY CHAIN.

2020 ECOSYSTEM

Our integrated ecosystem of INNOVATION, KNOWLEDGE and PROCUREMENT hubs help EMBs bring innovative ideas to market, develop business leaders of the future and achieve sustained growth through access to corporate supply chains.

To access more information on the 2020 Ecosystem, click the button below.

2020 ECOSYSTEM
GET INVOLVED AND HELP BRING INNOVATION TO LIFE

THE SUCCESS OF MSDUK INNOVATION CHALLENGE TO UNLOCK INNOVATION THROUGH DIVERSITY IS DUE TO EXTENSIVE SUPPORT WE HAVE RECEIVED FROM OUR EXISTING PARTNERS. THIS IS JUST THE BEGINNING AND WE CAN DO EVEN BETTER IN LEVERAGING DIVERSITY OF THOUGHTS AND BACKGROUNDS TO DRIVE INNOVATION.

We are keen to partner with UNIVERSITIES, ACCELERATORS, INNOVATION CENTRES, CATAPULT CENTRES, INVESTORS, VCS AND INDUSTRY NETWORKS. Let us all work together to bring these new ideas to life, support growth of exceptionally talented entrepreneurs from ethnic minority communities and help leverage these great ideas! There are so many different ways to work with us and we welcome an opportunity to work with you.

GO-TO-MARKET PARTNER
Product co-development, R&D support, access to market, procurement.

SHARED RESOURCES
Provide free tools, spaces for networking, discounted services.

KNOWLEDGE PARTNER
Speak or facilitate a workshop, business support mentor or consult as a field expert, feature in podcasts and articles.

INVESTMENT PARTNER
Offer investment to start-ups, become resident investor, offer investment advise and conduct regular surgery for start-ups.

FUNDING PARTNER
Provide grants, funding advice or investment that can be used to support the scaling of innovative businesses. Sponsor Innovation Challenge, winners prizes.

MEDIA PARTNER
Publish or contribute content about entrepreneurship, social impact reports, thought-leadership on diversity and inclusion.

“COMING TOGETHER IS A BEGINNING, STAYING TOGETHER IS PROGRESS, AND WORKING TOGETHER IS SUCCESS.”
- HENRY FORD

TO GET INVOLVED, CLICK: MAYANK@MSDUK.ORG.UK
“THE PROGRAMME HAS REINFORCED IN ME THE SENSE OF COMMUNITY THINKING WHERE ENTREPRENEURS SHOULD MAKE A DIFFERENCE IN THEIR COMMUNITY AS A WAY TO EMPOWER OTHERS FOR GREATER COMMUNAL SUCCESS.”

2018 RUNNER-UP – ROTIMI ALABI, MANAGING DIRECTOR, RAB-MICROFLUIDICS
“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