

YOUNG INVENTORS CHALLENGE ENTREPRENEURS

**WHY PARTICIPATE & A SHORT
HIGHLIGHT ON POTENTIAL
INNOVATIONS**



WHY PARTICIPATE?

YIC Competition is the first attempt to convert ideas into functional prototypes



The Entrepreneurship programme is meant to take ideas & prototypes to the next stage

Many a times, innovators create new inventions; however it takes someone else much later to recognise the value of the invention

Why Participate?

- Does the team or student want to take on the next challenge to bring their ideas and prototypes further?
- Do you want to get a feel of what goes on in innovative businesses besides the innovation itself?
- Do you want more feedback on your innovation from the industry or peers?
- Do you want a chance to collaborate with other peers or advisors to push your innovation further?

Every Masterpiece (small or big) has to start somewhere. The Entrepreneurship programme is meant as a platform to inculcate **the innovative mind-set, to create a like minded community and to bring these players/components together to create a conducive ecosystem for innovation.**

TYPES OF TEAMS FROM YIC?



THE GREAT PRESENTOR



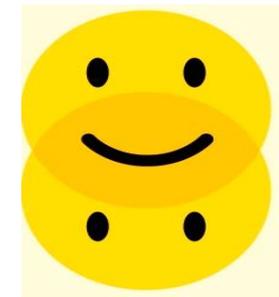
THE COMMUNITY FRIENDLY TEAM



THE GREAT INNOVATOR



THE MACRO APPROACH TEAM



THE ALL-ROUNDER



THE FRUGAL INNOVATORS



THE RESOURCE RICH INNOVATORS

POTENTIAL INNOVATIONS FROM YIC 2020



TEAM ENDEAVOUR

- Team members who have consistently created new products over the years.

- Innovation is similar to MySejahtera with additional global information.
- Application of IOT to detect ID of students before admission into schools has the potential to be further refined for proper application or to be incorporated to solve issues in other sectors or communities.

The Advantages of Our Invention

Contagion Buster	Other Solutions
School badge name identification into Cloud	Unable to identify school badge name
No human contact screening station	Manual screening by personnel
Mobile disinfectant robot	Manual disinfection by personnel
Apps with contact tracing	No contact tracing
Automated hand sanitizing robot	Manual hand sanitizer dispenser
Airtable used as cloud database to store students' personal information, enabling real time update	No real time update
Parents and teachers easy and prompt access to children's latest update status via our app	No immediate updates available for parents and teachers

POTENTIAL INNOVATIONS FROM YIC 2020



- VISA-RDVS is an Arduino-based system mounted on a SAR dog vest intended to map the dog's path and victim's location in real time.
- Product is almost ready for commercialisation and team may require assistance such as technical advisory or hand holding from industry players to push the innovation further.

TEAM WOOF

- An excellent example of an all rounder team.



POTENTIAL INNOVATIONS FROM YIC 2020

SCIENCE DEV



Thaksin Singro Siwakorn Suriya Chakkrit Mekpradap Nonthawat Doungnoi

Phitsanulok Pittayakom form THAILAND



TEAM SCIENCE DEV

- An team that attempted to solve a problem in the tilapia rearing community
- An example of a community friendly team, where on ground engagement were conducted before they embark on their innovation.



Patcharee Singsom
Fisheries, Bang Krathum District,
Phitsanulok province, Thailand

In Phitsanulok province, Most farmers prefer fish farming in cages

- Further assistance needed for the team to improve further on the technical and overall use of their feed feeder and database innovation particularly from the IT sector.

POTENTIAL INNOVATIONS FROM YIC 2021

About



Y-Knot Techies

We call our ourselves "Y-Knot Techies", a young generation of geeks who uses science and technology to improve life with precision and practicality.



Julian, 14



Sim Ean, 15



Yong Kang, 15

Y-Knot means:

- ▶ - Why Not? Because Nothing is Impossible.
- ▶ - A knot that allow a sharing of load between 2 anchor points which means two brains are better than one.
- ▶ - Knot is 1 nautical mile per hour which describe "speed, measurement and practicality".

TEAM Y-KNOT TECHIES

- Team members who have consistently created new products over the years.
- A team that is see a long term issue with the lock down due to Covid-19

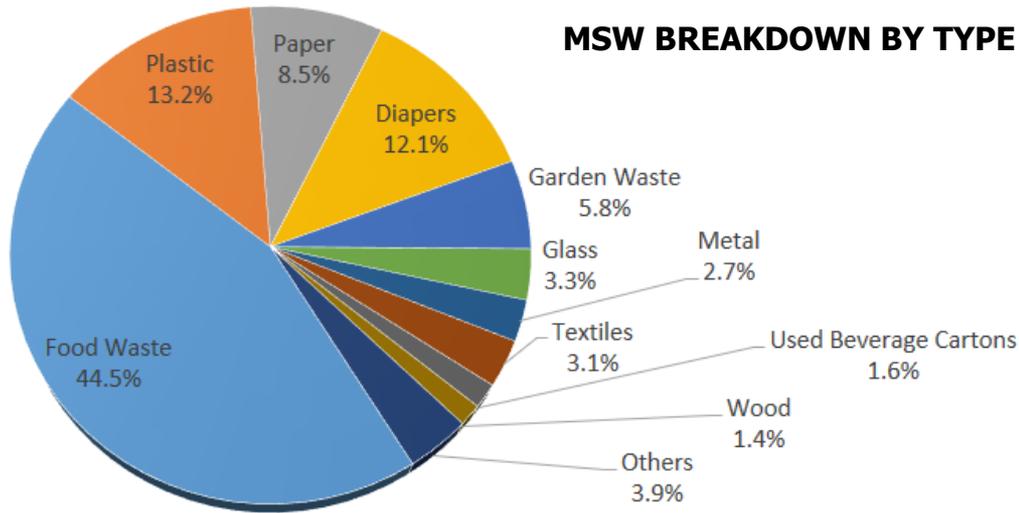
- Tries to detect and resolve mental health issue through an app. Information to mitigate these issues are also provided for in the app.
- Interesting product that require further assistance from experts in the psychological and mental health sector & the IT sector to further improve on their backend database and AI detection system

Comparison

Uniqueness of C.A.R.E.	C.A.R.E.	Woebot	Tess	Breathe Watch	PRISM
Function	IOT + Chatbot + Application	Chatbot	Chatbot	IOT + Mobile	IOT + Application
AI Chatbot	✓	✓	✓	✗	✗
IOT Panic Button	✓	✗	✗	✓	✗
API inputs for other devices	✓	✗	✗	✗	✓
Tracks & monitors emotions (EPS)	✓	✓	✓	✗	✓
Tracks anxiety episodes	✓	✗	✗	✓	✓
Elevate mood through interactive games	✓	✗	✗	✗	✗
Network-based support	✓	✗	✗	✓	✗
GPS Tracking when Panic Button is pressed	✓	✗	✗	✓	✗

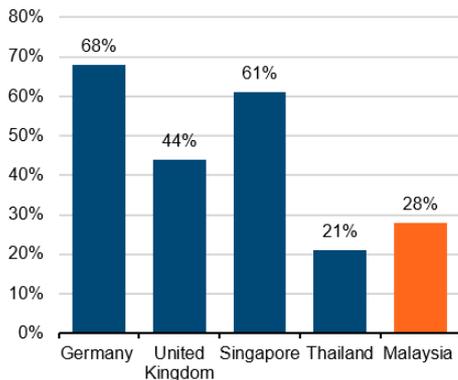


POTENTIAL INNOVATIONS FROM YIC 2021



Source: EPIC, Cenviro; 2019

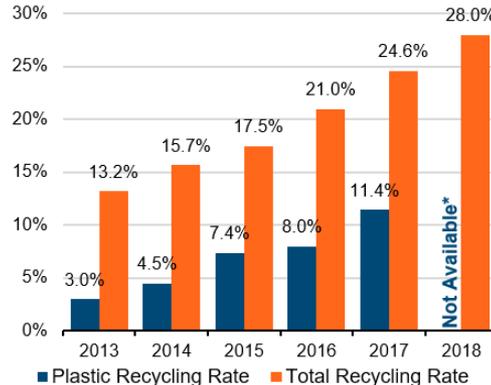
Recycling Rate of Selected Countries, 2017



Source: OECD (2019), MEWR (2018), Vassanadumrongdee et al. (2018)

*Note: Due to lack of data availability, figure for Thailand is only available for 2016.

Recycling Rate in Malaysia, 2013-2018



Source: SWCorp Malaysia (2018), Chu (2019) & author's calculations

*Note: Plastic Recycling Rate in 2018 is not available due to a lack of data.

Potential Tripartite with these teams



Team Techie Monkeys

-An example of a macro approach team.

-Technology and database app to promote recycling and segregation. iRecycle further acts as an intermediary between recycling centres and the public.

POTENTIAL INNOVATIONS FROM YIC 2021

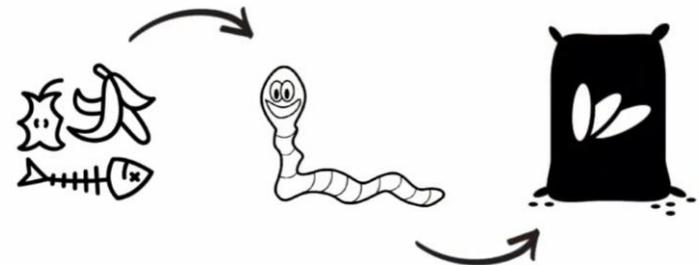


Team Green Revolve

- Team involved in the innovation of creating a self-segregating waste bin.
- Prototype can be further tested in a larger scale to test its reliability during usage
- Potential for personal home use or for a community wide application.

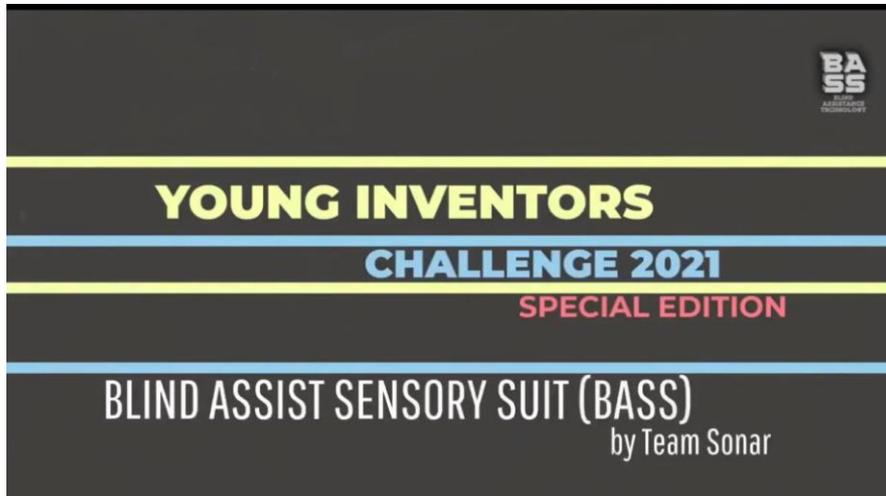
Team Pythoners

- Team involved in the innovation of automated and app driven rearing of earthworms for the purpose of converting organic waste to vermicompost.
- Good and practical inventions that require further advisory from vermicompost, agriculture and IT players.



This process involves two different scientific principles.

POTENTIAL INNOVATIONS FROM YIC 2021



Team Sonar

- Team involved in the innovation of sonar application to assist blind and visually impaired people.
- The team has very tastefully thought of the concept of incorporating the sonar technology into everyday apparels.
- Potential to further test the technical and practical aspect of the innovation with relevant stakeholders.
- Capability to be used in other sectors as well.
- A good example of a good presenter team, that knows how to use presentation, video editing and understands the importance of social media marketing.



THANK YOU

