HUAWEI X PIM
SEEDS FOR THE FUTURE

Seeds For The Future

PIM | 益启未来
PURPOSE IN MOTION

TECH4GOOD PLAYBOOK

Table of Contents

Introduction

Welcome to Tech4Good!

During this week, we will guide you through the process of developing an idea that uses technology to solve a social or environmental problem.

In this playbook, you will find daily exercises and tools that will guide you and your team to identify a problem you want to tackle and develop a unique solution. These exercises should take around an hour to complete each day. You will learn how to investigate a problem, prioritize ideas, craft a solution, and pitch it in a compelling way to our judges. As you will work closely with your team, collaboration is key.

It is our hope that you will find inspiration from this playbook as well as from each other to develop truly incredible ideas that will help make the world a better place. We are excited to see where this journey leads you. Are you ready?

How should I use the playbook?

The Playbook is a critical part of your Tech4Good learning experience.

You can reference the Playbook for general resources on the topic of Tech4Good, and use it as a guide for daily activities that you should complete to put together your group project.

Contact INFORMATION

For more information about Tech4Good and other components of the Huawei Seeds for the Future program, please check out the Seeds official website.

If you have any concerns or questions, always feel free to email the Seeds team at seeds@huawei.com and the PIM team at t4g@pimchina.org by cc'ing both as recipients.

The information contained in this Tech4Good Playbook are provided by PIM, and does not imply endorsement of or representation by Huawei Technologies Co. Ltd.

Global Competition

As a reward for their effort, the cohort winning team will receive 3 additional mentorship sessions to support them in developing their ideas.

At the end of the year, student teams across all countries are invited to apply to the Tech4Good Global Competition. The Global Competition provides all participants from the Seeds for the Future program with the opportunity to address an existing social problem using technology, connect with internationally-renowned social impact leaders and investors, and gain professional guidance from experienced mentors.

The Global Competiton will take place in January 2023.

Prizes for Global Competition:

10 shortlisted teams will receive a series of online pre-competition trainings on tech innovation, social entrepreneurship, pitch presentation skills and more by experts in these industries. The top three project teams selected by the judge committee will receive generous rewards including cash prizes, mentorship program valued at 10,000 USD, consultation with Huawei executive, opportunity to be featured on Huawei official website, meeting with an angel investor (for Top 1 only), and more.

Competition details will be updated on Huawei's Seeds for the Future website and Linkedin group closer to the date.

Schedule

Select a Theme

1-HOUR SESSION

Activities - Pick a theme, Explore the theme

DAY 1

Investigate the problem

1-HOUR SESSION

Activities - Online research or interviews, create a persona, problem summary

DAY 2

Brainstorm solutions

1-HOUR SESSION

Activities - Market analysis, Group ideation, Ideas prioritization matrix

DAY 3

Define success

1-HOUR SESSION

Activities - Hypothesis and idea framework, Define success, Business model canvas

DAY 4

Prepare your pitch

1-HOUR SESSION

Practice your presentation and receive feedback from peers and mentors

DAY 5

Prototype your idea

OPTIONAL 1-HOUR COACHING

Activities - Prototype, gather feedback, create a product walkthrough

DAY 6~7

Pitch Day

1-HOUR SESSION

Pitch your project in front of judges

DAY 8

Tech

Introduction to Digital Technologies

We live in a world where information is accessible to larger groups of people, in both remote and highly networked regions, faster than ever before. New communication and digital technologies emerge daily. Yet our planet is more fragile than ever, and we are facing new social and environmental challenges (some directly related to technology).

Digital technologies have a transformational impact on the world. We have grouped and categorized six digital technologies that are broadly representative of how the way digital capabilities will evolve in the short and medium term.

These technologies are:

- Artificial intelligence and data
- Blockchain
- Digital Reality
- Internet of Things
- Mobile and Web Applications
- Social Media

These technologies can affect the world in multiple ways. One framework of thinking about the function and role of these technologies is the following:

Connect & Communicate

Connect people to each other and to critical information.

Monitor & Track

Observe the world and its natural and man-made systems in real time.

Analyze, Optimize & Predict

Develop insights from data and use those insights to drive process efficiency and infer the future.

Augment & Automate

Provide an "active bridge" between digital and physical, from simulation through augmentation to the creation of autonomous systems

Source: Digital with Purpose: Delivering a SMARTer2030

Artificial Intelligence and Data Analytics

Data analytics refers to technologies that study data and draw patterns. For example, descriptive analytics can study data to describe what is happening, while predictive analytics can predict what will happen based on current occurrences. Artificial Intelligence (AI) is technology designed to emulate the human mind, particularly in areas such as analysis and learning. AI is designed to draw conclusions on data, understand concepts, become self-learning and even interact with humans.

One key aspect is that the aim of AI and Machine Learning (ML) is not to replace humans, but to augment their capabilities. As AI is able to tackle routine tasks and increasingly complex non-routine tasks, humans can concentrate their efforts on tasks that have the most added value – those that really need human judgement. For instance, staff deployed in operations do not need to go through every invoice and process it in the appropriate way for the supplier. Instead, they can focus on the more complex ones while the AI algorithm processes the great majority of the invoices – faster, cheaper and more accurately than humans. By learning from large samples of data, AI algorithms can recommend better decisions than humans, discover complex patterns that are hard for the human eye to spot and accurately predict outcomes by taking into account more variables and complex associations than a human ever could.

Excerpted from Deloitte Insights Lab

Artificial Intelligence (AI)

The simulation of human intelligence in machines that are programmed to think like humans and mimic their actions.

Machine Learning

An area of artificial intelligence (AI) with a concept that a computer program can learn and adapt to new data without human intervention.

Big Data

A great quantity of diverse information that arrives in increasing volumes and with ever-higher velocity.

Resources

- [Video] Quick Intro to AI
- [Video] Data for the People (Huawei)
- [Video] Overview of AI (Huawei)
- [Video] AI Advanced: Machine Learning and Deep Learning (Huawei)
- [Video] When AI Takes Control (Huawei)
- [Video] Huawei AI Deployment (Huawei)
- [Course] Artificial Intelligence Course (MIT)
- [Course] Machine Learning Course with Andrew Ng (Stanford)
- [Text] What are AI and ML? (Deloitte)

Digital Reality

Augmented Reality

Visual, auditory, or other sensory information overlaid onto the world through technology in order to enhance one's experience.

Virtual Reality

A computer-generated simulation in which a person can interact within an artificial three-dimensional environment using electronic devices

Resources

- [Video] What is Digital Reality?
- [Text] What is Digital Reality? (Deloitte)
- [Text] The Complete Guide to Virtual Reality (Virtual Speech)
- [Text] What taking VR and AR mainstream means for sustainable development (World Economic Forum)
- [Text] Augmented and virtual reality: The promise and peril of immersive technologies (McKinsey)
- [Text] How Companies Are Using VR to Develop Employees' Soft Skills (Harvard Business Review)
- [Text] How AR Is Redefining Retail in the Pandemic (Harvard Business Review)

Digital reality refers to the wide spectrum of technologies that simulate reality in various ways. Unlike other technologies using flat screens (e.g. a computer or television), Digital Reality immerses you in the content providing you with a first person perspective that allows the user more agency in terms of choosing the perspective and control of the media in their field of view. There are several different technology features related to digital reality: these include AR, VR and MR.

Augmented Reality: AR overlays digitally created content into the user's real-world environment. It uses transparent optics and a viewable environment in which users are aware of their surroundings and themselves. An additional advantage of AR is its inherently three dimensional nature of media which means it can be viewed from all angles by multiple audiences simultaneously.

Virtual Reality: Using VR head mounted displays, users find themselves in a 360° video or computer-generated world. The digital space fully replaces your real-world environment. VR takes also full advantage of body- and motion-tracking capabilities, with many arguing that this leads to a greater sense of presence and immersion.

Mixed Reality: MR is a combination of AR and VR, seamlessly blending the user's real-world environment and digitally created content in a way that allows both environments to coexist and interact.

Excerpted from Deloitte Insights Lab

Internet of Things

The Internet of Things (IoT) refers to a world of products that are connected to a network, such as the Internet, a company intranet or a network using industrial communication protocols. IoT products can be anything, from an iPhone, to a wind turbine, to a refrigerator, as long as they have a way of communicating to a 'home base', to send or receive data. Connected products generate data for automating business processes or enabling new services. This data can be used to improve the technical characteristics or the usability of a product, or to offer new services to customers, or it can be sold to a third party.

In essence, the Internet of Things can have four elements:

- **Things**: Physical devices and objects intelligently connected
- **Processes**: Delivery of the right information to the right place at the right time
- **Analytics**: Individual data streams processed and analyzed with algorithms
- **People**: Users gaining valuable insights about their Things, or being provided with relevant services

IoT should be viewed as a technology enabler to respond to customer pain points. It offers the possibility of understanding, correcting, and improving customer outcomes through analysis of data. IoT will acquire this data and transform it into insights, to create a win-win situation for both users and manufacturers.

Excerpted from Deloitte Insights Lab

Internet of Things

A network of connected objects with built-in sensors that collect and share data about the way they are used and about the environment around them.

Resources

- [Video] Overview of IoT Technologies (Huawei)
- [Video] Smarthome Network Overview (Huawei)
- [Video] Cloud Computing and Internet of Things (Huawei)
- [Video] Universal Framework for Intelligent Cities (Huawei)
- [Text] What is IoT? (Deloitte)
- [Text] Digital twins: Bridging the physical and digital (Deloitte)
- [Text] Smart cities: Digital solutions for a more livable future (McKinsey)

Blockchain

Blockchain
A decentralized, distributed collection of records, where each new block of encrypted information is permanently chained onto previous records in chronological order, and all users retain collective control.

Cryptocurrency
A digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend.

Resources
- [Video] Blockchain Explained
- [Text] Blockchain explained... in under 100 words (Deloitte)
- [Text] Introduction to Blockchain for Beginners - Non Technical (CoinMonks)
- [Text] What is Blockchain Technology? A Step-by-Step Guide For Beginners (Blockgeeks)
- [Text] What Are Smart Contracts and How Do They Work? (Decrypt)
- [Text] A Guide to Crypto Collectibles and Non-fungible Tokens (Binance)
- [Text] Positive Blockchain

Blockchain is a decentralized, distributed collection of records, where each new block of encrypted information is permanently chained onto previous records in chronological order, and all users retain collective control.

In a traditional environment, trusted third parties act as intermediaries for financial transactions. If you have ever sent money overseas, it will pass through an intermediary (usually a bank). It will usually not be instantaneous (taking up to 3 days) and the intermediary will take a commission for doing this either in the form of exchange rate conversion or other charges.

The original Blockchain is open-source technology which offers an alternative to the traditional intermediary for transfers of the crypto-currency Bitcoin. The intermediary is replaced by the collective verification of the ecosystem offering a huge degree of traceability, security and speed.

Block-chain technology is broader than finance. It can be applied to any multi-step transaction where traceability and visibility is required. Supply chain is a notable use case where Blockchain can be leveraged to manage and sign contracts and audit product provenance. It could also be leveraged for votation platforms, titles and deed management - amongst myriad other uses. As the digital and physical worlds converge, the practical applications of Blockchain will only grow.

Excerpted from Deloitte Insights Lab

Mobile & Web Applications

Mobile applications consist of software/set of programs that run on a mobile device and perform certain tasks for the user. Web applications is a software that runs on a web server, and are accessed by the user through a web browser with an active network connection. Mobile and web applications are easy, user friendly, and relatively inexpensive.

With growing smartphone and mobile penetration around the world, the impact of mobile and web applications is set to continue to increase.

Here are some examples of commonly used mobile and web applications:

1. Communications: Internet browsing, email, social networking
2. Online Retail: purchasing goods and services
3. Location-Based Services: Global Positioning Software (GPS), weather
4. Multimedia: Graphics, videos, audio
5. Productivity: calendars, processors, spreadsheets
6. Games

5G

5G is the 5th generation mobile network with higher speeds, superior reliability and negligible latency.

API

An application programming interface (API) allows two applications or services to communicate with and access information from each other.

Resources

- [Video] 5G Basic: Introduction to 5G Knowledge (Huawei)
- [Video] 5G Network Architecture and Key Technologies (Huawei)
- [Video] 5G Applications and Use Cases (Huawei)
- [Text] What is Web 3.0? (CoinMarketCap)
- [Text] Building a great digital business (McKinsey)
- [Text] How No-Code And The Democratization Of Application Development Are Helping Businesses
- [E-Book] Progressive Web Apps: the future of the mobile web

Social Media & Networks

Social Media

Common features of social media or social networking services: They are generally Internet-based applications, mainly reliant on user-generated content (UGC) and aims to facilitate connections via users and increase engagement.

Resources

- [Text] The evolution of social technologies (McKinsey)
- [Text] The Era of Antisocial Social Media (Harvard Business Review)
- [Text] Advanced social technologies and the future of collaboration (McKinsey)
- [Text] Use Your Social Network as a Tool for Social Justice (Harvard Business Review)
- [Text] The Future of Social Media Is All Talk (WIRED)
- [Text] The future of social networks might be audio (MIT Technology Review)

A social networking service (also social networking site or social media) is an online platform which people use to build social networks or social relationships with other people who share similar personal or career interests, activities, backgrounds or real-life connections

The main types of social networking services contain category places (such as age or occupation or religion), means to connect with friends (usually with self-description pages), and a recommendation system linked to trust. One can categorize social-network services into four types:

1. Social networks
2. Multimedia sharing networks
3. Blogging and information sharing
4. Discussion and reviews networks

4Good

Introduction to the Sustainable Development Goals

The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all.

In 2015, world leaders from all the member states of the United Nations (UN) — 193 countries in total — came together to commit to 17 Sustainable Development Goals (SDGs) in order to create a safer, healthier, and more prosperous world by 2030.

Structured around 5 pillars (people, planet, prosperity, peace and justice, and partnerships), the SDGs called for action by all countries — poor, rich, and middle-income — and set out quantitative objectives across the social, economic, and environmental dimensions of sustainable development.

In the following section, we have grouped the UN SDGs into five themes:

- Basic Human Needs
- Education and Work
- A Fair and Just Society
- Sustainable Lifestyles
- Natural Resources

In each theme, you will be able to find case studies of how technology has been applied to solve a social or environmental problem. These can serve as inspiration for your own projects.

Basic Human Needs

Approximately 17% of the world's population - more than 1 billion people - still lives at or below $1.25 per day. After decades of steady decline, the number of people who suffer from hunger began to slowly increase again in 2015. Current estimates show that nearly 690 million people are hungry. If recent trends continue, the number of people affected by hunger would surpass 840 million by 2030.

Before the pandemic, major progress was made in improving the health of millions of people, but COVID-19 has devasted health systems globally. Billions of people throughout the world still lack access to safely managed water and sanitation services and basic handwashing facilities at home.

From UN SDG

Additional References

- Goal 1: No Poverty (SDG Compass)
- Goal 2: Zero Hunger (UN)
- Goal 3: Good Health & Wellbeing (UN)
- Goal 6: Clean Water and Sanitation
- Gates Foundation Global Health Program Overview
- How will we personalize health? (IDEO)
- Helix Center: Digital Health Innovation Lab - Projects
- How to Mobilize Healthier Communities (TED Talks Playlist)
- Blueprint on Business Leadership for SDG 3
- WEF Future of Health & Healthcare

Health x Mobile and Web Application

Persona

NAME

Timi

DEMOGRAPHICS

- 24 years old
- Lagos, Nigeria
- Software Engineer

WANTS & NEEDS

- Newborn son has anemia and needs to get a blood donor

CURRENT SOLUTIONS

- Spreading the word via family, office and church friends

Case Study: Haima Health Initiative

WHAT PROBLEM IS IT TRYING TO SOLVE?

Over 100,000 children die annually in Nigeria from complications related to anemia-Sickle Cell Disorder and a shortage of blood supply. In low income countries there is a huge demand for blood transfusion, mostly because of complications in pregnancy or children under 5 suffering anaemia.

WHAT IS THE PROPOSED SOLUTION?

Haima Health Initiative is Nigeria's first online and mobile blood bank deploying a Blood Supply Chain System (BSCS) backed by a database of voluntary blood donors who are connected to patients in real-time using Global Positioning System (GPS), mobile and web technology.

WHAT CHANGE WILL THE SOLUTION BRING?

Improve blood availability for people in need, and reduce blood racketeering and 'blood black market' operations. Over 100 volunteers across 5 states in Nigeria have been trained how to use the system and how to encourage people to sign up.

Learn More

- Haima Health Initiative
- Meet Bukola Bolarinwa of Haima Health Initiative
- Bukola Bolarinwa shares her advice for young leaders

Image by Haima Health via F6S

Image by Lagos State Blood Transfusion Service via Twitter

Wellbeing x Digital Reality

Persona

NAME

John

DEMOGRAPHICS

- 31 years old
- London, UK
- Software Engineer
- Lives with 3 roommates

WANTS & NEEDS

- Exercise, fun, friends

CURRENT SOLUTIONS

- Has gym membership through workplace; goes once or twice a month
- Sees therapist for mental health support

Case Study: Pokemon Go

WHAT PROBLEM IS IT TRYING TO SOLVE?

People who lead sedentary lifestyles have increased risk in physical health (e.g. double the risk of cardiovascular diseases, diabetes, and obesity) and mental health (e.g. depression and anxiety). It's difficult to engage teens and young adults in behavioral treatments for depression and anxiety disorders.

WHAT IS THE PROPOSED SOLUTION?

Pokemon Go incorporates exercise into gaming through Pokemon characters appearing in augmented reality

WHAT CHANGE WILL THE SOLUTION BRING?

Players walk more to capture pokemon. The game eases anxiety and depression by getting players outside and connecting them with other players who have similar interests and passions.

Learn More

- Pokemon Go
- Why 'Pokémon GO' Is The World's Most Important Game
- How Pokemon Go Helps Mental Health
- Niantic CEO Says Pokémon GO's Intention Was To Encourage Players To Explore The World

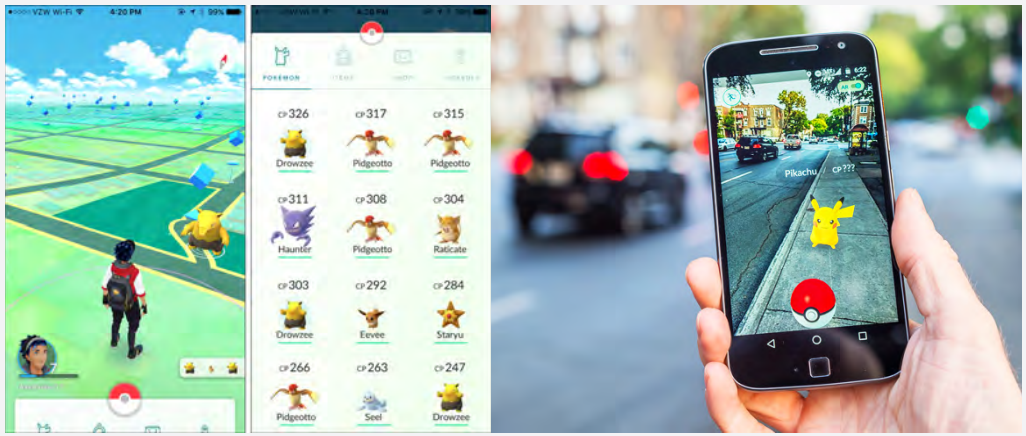
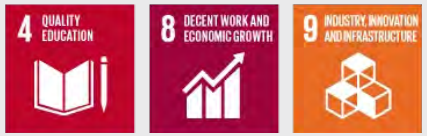


Image via TechGenyz

Education and Work



At the end of 2019, millions of children and young people were still out of school, and more than half of those in school were not meeting minimum proficiency standards in reading and numeracy. The closure of schools to slow the spread of COVID-19 is having an adverse impact on learning outcomes and the social and behavioural development of children and young people. It has affected more than 90 per cent of the world's student population, 1.5 billion children and young people.

Even before the current crisis, the global economy was growing at a slower rate than in previous years notwithstanding improvements in labour productivity and unemployment. The pandemic has abruptly and profoundly disrupted it, pushing the world into a recession. The unprecedented shock to the world's labour markets is expected to result in a decrease of around 10.5 per cent in aggregate working hours in the second quarter of 2020, equivalent to 305 million full-time workers. The pandemic has also hit manufacturing industries hard and causing disruptions in global value chains and the supply of products.

From UN SDG

Additional References

- SDG 4: Quality Education
- SDG 8: Work and Economic Growth
- SDG 9: Industry, Innovation, and Infrastructure
- WEF Future of the New Economy and Society
- Gates Foundation K-12 Education Strategy Overview
- How can design advance education? (IDEO)
- Creativity, Culture, & Education Case Studies
- TED Talks by Sir Ken Robinson and his education playlist
- 100 inspiring innovations that are changing the face of education in 2021

Education x Artificial Intelligence

Persona

NAME

Manuel

DEMOGRAPHICS

- 15 years old
- São Paulo, Brazil
- Student

WANTS & NEEDS

- Like reading fiction and watching movies
- Dislikes math and sciences

CURRENT SOLUTIONS

- Older sister sometimes helps him with homework

Case Study: Geekie

WHAT PROBLEM IS IT TRYING TO SOLVE?

Only ten percent of those who finish high school in Brazil learn the basics in Portuguese and Mathematics. This reinforces a vicious circle of poverty and poor education.

WHAT IS THE PROPOSED SOLUTION?

Geekie offers an assessment tool that provides feedback in real time, an adaptive learning platform that customizes the study plan for every student, and a test prep tool that makes regular assessments of students in order to offer personalized study plans.

WHAT CHANGE WILL THE SOLUTION BRING?

Students who use Geekie's solutions score on average 30 percent percent higher grades over a two-month period than students who don't use the platform. Geekie has impacted more than five million students in over 20,000 schools so far.

Learn More

- Geekie (Brazil)
- How software that learns as it teaches is upgrading Brazilian education
- Geekie: Personalized Learning for All

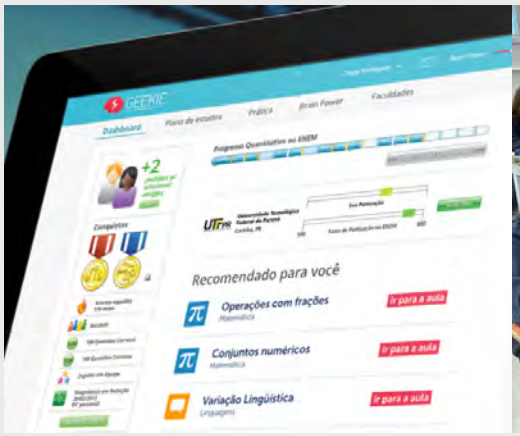


Image by Thiago Capanema via Coroflot

Image by Geekie via Instagram

Job Training x Digital Access

Persona

NAME

David

DEMOGRAPHICS

- 17 years old
- Ajaccio, France
- Student

WANTS & NEEDS

- Likes basketball and soccer
- Wants to get a well-paying job after high school and move to Paris

CURRENT SOLUTIONS

- Works in the local shopping center and as a tour guide

Case Study: DigiTruck

WHAT PROBLEM IS IT TRYING TO SOLVE?

13 million people in France do not have access to the Internet. As a result, many of them also lack the digital skills that employers need, limiting both individual opportunities and also the talent pool able to contribute to national economic growth.

WHAT IS THE PROPOSED SOLUTION?

Huawei partnered with Close the Gap and Simplon, a local French training institute, to deliver training in digital skills for unemployed teenagers through a solar-powered mobile classroom, DigiTruck, equipped with internet access and smart devices such as computers, smartphones, and VR headsets.

WHAT CHANGE WILL THE SOLUTION BRING?

Digitruck aims to reach 10,000 participants in 2021. Teenagers will be taught essential skills in six areas, which are designed to cover the work skills they need to flourish personally in the world of work and to contribute to France's continued economic growth.

Learn More

- DigiTruck (Close the Gap)
- DigiTruck in France
- DigiTruck in Kenya

Image via Huawei

A Fair and Just Society

A world with gender equality is one in which every woman and girl enjoy full gender equality and all legal, social and economic barriers to their empowerment have been removed. The pandemic has disproportionately affected women and girls. Globally, women make up three quarters of medical doctors and nursing personnel. Women already spend three times as many hours as men on unpaid care work at home. Reports from several countries suggest that domestic violence against women and children is also rising during the global lockdown.

The pandemic is also hitting the poorest and most vulnerable people and countries the hardest and threatens to have a particularly damaging impact on the poorest countries. It is exposing the profound inequalities that exist within and among countries and is exacerbating those inequalities.

Millions of people have been deprived of their security, human rights and access to justice. In 2018, the number of people fleeing war, persecution and conflict exceeded 70 million, the highest level recorded by the Office of the United Nations High Commissioner for Refugees in nearly 70 years. The pandemic is potentially leading to an increase in social unrest and violence.

From UN SDG

Additional References

- SDG 5: Gender Equality
- SDG 10: Reduced Inequalities
- SDG 16: Peace, Justice and Strong Institutions
- Global Gender Gap Report 2020 (WEF)
- Gender Equality Insights (McKinsey)
- What Is 'Gender Parity'?
- LandMark Map
- SDG 16 Hub
- SDG 16 - WEF Strategic Intelligence
- Global Social Mobility Index 2020 (WEF)
- International Alert
- International Rescue Committee

Gender Equality x Social Network

Persona

NAME

Ashwini

DEMOGRAPHICS

- 47 years old
- First time Internet user
- Homemaker in Pune, India
- Enjoys knitting and weaving

WANTS & NEEDS

- Community - feeling like she has friends beyond her home
- Make some side income from her hobby

CURRENT SOLUTIONS

- Friends at the temple occassionally will purchase her quilts and clothes

Case Study: Sheroes

WHAT PROBLEM IS IT TRYING TO SOLVE?

The big gender gap in the Indian internet ecosystem, the lack of diversity in the workplace, and the insignificant amount of women workforce

WHAT IS THE PROPOSED SOLUTION?

A women's community platform, offering support, resources, opportunities and interactions via Sheroes.com and the SHEROES App. Women can also sell products to each other and learn how to become an entrepreneur.

WHAT CHANGE WILL THE SOLUTION BRING?

Create a safe and trusted space where members discuss health, careers, relationships and share their life stories, achievements and moments. In the next five years, the SHEROES stack aims to put 100 million women on the growth road map.

Learn More

- Sheroes
- In Sairee Chahal's Shoes: The SHEROES Story And Backing Women Entrepreneurs In India
- SHEROES set to launch neo banking platform for women

Image via Sheroes

Gender Equality x Internet of Things

Persona

NAME

Ashley

DEMOGRAPHICS

- 38 years old
- Berlin, Germany
- Marketing Professional
- Mom of 2 kids and 3 dogs

WANTS & NEEDS

- Experience bladder control issues since her 2nd pregnancy
- Gynaecologist gave her pelvic floor exercises -- she did them once after her last appointment. She didn't know whether she was doing them properly.

CURRENT SOLUTIONS

- Uses incontinence pads and underwear

Case Study: Elvie Trainer

WHAT PROBLEM IS IT TRYING TO SOLVE?

Urinary incontinence is a loss of bladder control that's commonly seen in older adults and women who have given birth or gone through menopause, as those experiences can cause a woman's pelvic support muscles to weaken over time.

WHAT IS THE PROPOSED SOLUTION?

Elvie Trainer visualizes pelvic floor movements in real time and turns it into a game to lift a gem on the app according to the strength of the pelvic contraction. It also measures force and motion to detect incorrect contraction and helps users to improve their kegel technique.

WHAT CHANGE WILL THE SOLUTION BRING?

Better bladder control, faster postnatal recovery and enhanced intimacy.

Learn More

- Elvie Trainer
- Are You Kegel-ing Correctly?
- The Latest Women's Health Issue to Finally Get Its Due? Incontinence

Image via The UX Blog

Image via TechGenyz

Sustainable Lifestyles

Rapid urbanization has resulted in a growing number of slum dwellers, inadequate and overburdened infrastructure and services and worsening air pollution. The pandemic will hit the hardest the more than 1 billion slum dwellers worldwide, who suffer from a lack of adequate housing, no running water at home, shared toilets, few or no waste management systems, overcrowded public transport and limited access to formal health-care facilities. Many in that population work in the informal sector and are at high risk of losing their livelihood as cities shut down. Urgent response plans are needed to prepare for and respond to outbreaks in informal settlements and slums.

Worldwide consumption and production, a driving force of the global economy, rely on the use of the natural environment and resources in a model that continues to lead to destructive impacts on the planet. The pandemic offers countries an opportunity to build a recovery plan that will reverse current trends and change consumption and production patterns towards a sustainable future.

From UN SDG

Additional References

- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Production & Consumption
- Sustainability by Design (TED Talks)
- Ellen MacArthur Foundation Systemic Initiatives
- The Circular Design Guide
- Precious Plastic
- H&M Foundation Global Change Award
- Harnessing the 4th Industrial Revolution for Sustainable Emerging Cities
- #ZeroWasteCities
- The Business Case for Sustainable Production (Accenture)

Responsible Consumption x Blockchain

Persona

NAME

Alisha

DEMOGRAPHICS

- 32 years old
- Manila, Philippines
- Eco-brand entrepreneur

WANTS & NEEDS

- Wants to reach more customers

CURRENT SOLUTIONS

- Has a page on her website about her product origins

Case Study: Provenance

WHAT PROBLEM IS IT TRYING TO SOLVE?

70% of consumers are interested in the sustainability impact of the products they buy but supply chains are complex and lack of transparency.

WHAT IS THE PROPOSED SOLUTION?

Provenance gathers and shares key product information on public blockchains, enabling shoppers to review 'verified' information on businesses and products.

WHAT CHANGE WILL THE SOLUTION BRING?

Provenance increases the transparency and integrity of supply chains by creating a decentralised, auditable, and tamper-proof layer of information between businesses and shoppers.

Learn More

- Provenance
- Blockchain in Supply Chain Management (Consensys)
- Global Supply Chains Are About to Get Better, Thanks to Blockchain (HBR)

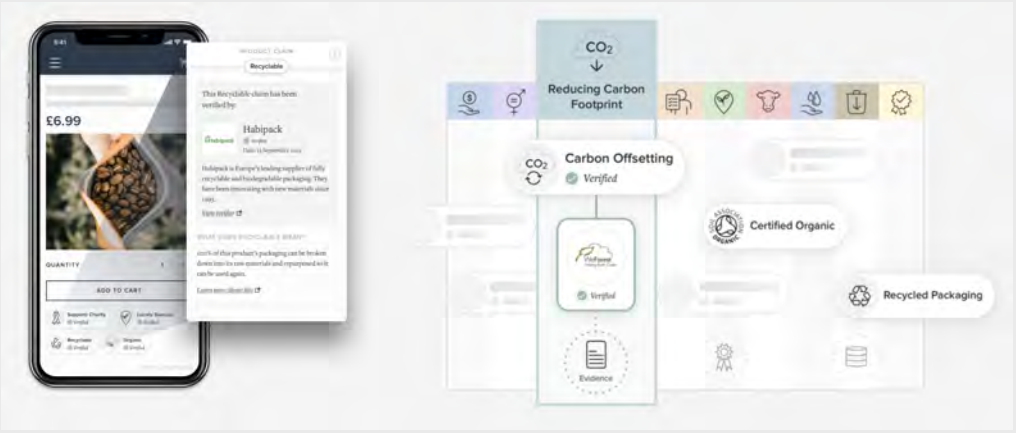


Image via Provenance

Sustainable Cities x IoT

Persona

NAME

Ming

DEMOGRAPHICS

- 45 years old
- Works at Lanzhou Fire Service Department

WANTS & NEEDS

- Wants to be able to respond to fires more efficiently

CURRENT SOLUTIONS

- Waits for phone calls from dispatch

Case Study: Lanzhou New Area

WHAT PROBLEM IS IT TRYING TO SOLVE?

The current challenges faced by LNA include insufficient resources, a fragile environment, and the need for new development methods.

WHAT IS THE PROPOSED SOLUTION?

This area includes a data industrial park for cloud computing and a Silk Road information hub; smart healthcare system with shared Electronic Health Records (EHR) and bio data; smart environmental protection with unified IoT platform connecting thousands of sensors from departments from the Bureau of Ecology and Environment to the Civil Service Bureau; smart government; and other smart services.

WHAT CHANGE WILL THE SOLUTION BRING?

These Smart Services have brought services to more people and created a good business environment in LNA, attracting more than 500 enterprises.

Learn More

- Lanzhou New Area, a New Smart City in Northwest China
- Huawei Horizon@City
- Smart City Technology Turns Green Buildings into a Green City

Image via Huawei

Natural Resources

Millions of people in the world still lack access to electricity, and progress on facilitating access to clean cooking fuels and technologies has been slow.

2019 was the second warmest on record and the end of the warmest decade. With a global average temperature of 1.1°C above estimated pre-industrial levels, the global community is far off track to meet either the 1.5 or 2°C targets called for in the Paris Agreement. Progress made during the pandemic is only temporary from travel bans and the economic slowdown.

Oceans and fisheries continued to support the global population's economic, social and environmental needs while suffering unsustainable depletion, environmental deterioration and carbon dioxide saturation and acidification.

Forest areas continue to decline. Most key biodiversity areas still have incomplete or no coverage by protected areas. Globally, the species extinction risk has worsened by about 10 per cent over the past three decades, driven primarily through habitat loss from unsustainable agriculture, harvest and trade; deforestation; and invasive alien species.

From UN SDGs

Additional References

- Goal 7: Affordable and Clean Energy
- Goal 13: Climate Action
- Goal 14: Life Below Water
- Goal 15: Life on Land
- International Renewable Energy Agency (IRENA)
- Energy4Impact
- The Climate Reality Project
- 10 Things You Can Do to Save the Ocean (National Geographic)
- Protecting Important Marine Habitat
- Stand for Trees
- Protecting Species (World Wildlife Fund)

Life Below Water x Blockchain

Persona

NAME

Anna

DEMOGRAPHICS

- 20 years old
- Sydney, Australia
- University student

WANTS & NEEDS

- Loves snorkelling
- Hopes to protect the environment so that she can continue her hobby

CURRENT SOLUTIONS

- Watches movies and documentaries about environmental change
- Joins an environmental club to clean up the beach

Case Study: Crypto Coral Tribe

WHAT PROBLEM IS IT TRYING TO SOLVE?

25% of marine biodiversity and more than 850 millions of humans depend on corals, but half of the world's coral reefs have disappeared in the last 30 years.

WHAT IS THE PROPOSED SOLUTION?

CryptoCorals is positive impact game, using blockchain technology, to save coral reefs. Users can purchase CryptoCorals on the blockchain which funds the plantation of real corals by one of our partner NGOs. Each player receives a certificate and photos/video to track their impact on the reef.

WHAT CHANGE WILL THE SOLUTION BRING?

CryptoCorals hope to raise awareness about coral reefs going extinct and possible solutions to protect our oceans, particularly among the gamer community which otherwise might not be reached.

Learn More

- Crypto Coral Tribe
- We are creating the first crypto-collectible for Good
- Crypto Coral Tribe: Art & Creative Process

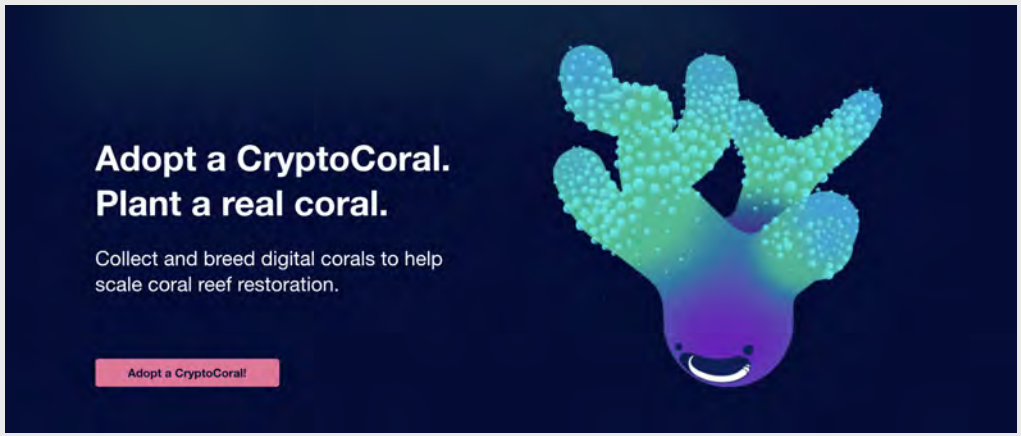


Image via CryptoCoral 2021

Life on Land x Artificial Intelligence

Persona

NAME

Enzo

DEMOGRAPHICS

- 37 years old
- Lives in Taytay, Palawan, Philippines
- DENR forest ranger

WANTS & NEEDS

- Wants to stay safe while protecting the forest from logging and environmental threats

CURRENT SOLUTIONS

- Maintaining forest inventory by tree marking
- Perform fire detection through ground patrol or tower staffing

Case Study: Forest Guardian

WHAT PROBLEM IS IT TRYING TO SOLVE?

Palawan rainforest plays a crucial role in maintaining the ecological balance of the entire region but loses about 5,500 hectares of rainforest every year with the continued encroachment of agricultural and residential land, prevalence of commercial and illegal logging, and frequent forest fires.

WHAT IS THE PROPOSED SOLUTION?

Powered by solar panels, Forest Guardian system comprises old cell phones that monitor and record sounds of human activity and capture data on animal behavior patterns. Identified by AI, forest sounds and data are uploaded to cloud and sent to forest rangers who can quickly respond to real-time alerts.

WHAT CHANGE WILL THE SOLUTION BRING?

Huawei expects that in 2020, the system will more than double the amount of forest it covers from 2,500 km2 to 6,000 km2. RFCx estimates that the amount of forest protected by the system will boost CO2 absorption by 30 million tons, which is the equivalent of taking 6 million cars off the road.

Learn More

- Protecting the Palawan Rainforest in the Philippines

Image via Huawei

Day 1

Select a Theme

There are so many challenges in this world – how to go about picking what to tackle? A good place to start is to learn about the United Nations Sustainable Development Goals (SDGs). They are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including poverty, inequality, climate change, environmental degradation, peace and justice.

1. Pick a Theme

Review the themes and examples provided on page 13-23 on your own. Pick 2 themes that you are most interested in and share that with your teammates. Within your team, find out which theme is the most popular and has the most interest from your teammates – that should be your group theme.

SUGGESTED TIME:
10 minutes (individual reflection)
5 minutes (group alignment)

2. Explore the Theme

Once you have picked a common theme that your whole team is happy with working on, spend 10 minutes reflecting on the following questions individually. Write down your answers and share with your teammates. As a team, identify any commonalities and highlight the problems and ideas you find the most interesting.

SUGGESTED TIME:
15 minutes (individual reflection)
30 minutes (group discussion).

By the end of Day 1, your team should have selected ONE theme from the five areas to focus on for the rest of the week. You should have identified some specific problems within that theme and initial ideas that your team is excited to work on. Don't worry if the idea is not fully refined yet – that is what we will work on in the next few days!

3. Prepare for Day 2

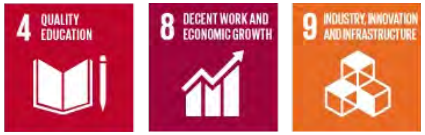
Be ready to show the theme chart (p34) to your mentor on Day 2 and articulate why this theme matters to your team verbally.

DAY 1

1. Pick a Theme

Basic Human Needs

Education and Work



A Fair and Just Society

Sustainable Lifestyles

Natural Resources

DAY 1

2. Explore the Theme

Why I Care About This Theme

Example: I care about the issue of education and work. I grew up in a village and my experience was that village children often don't have the same resources as city children, such as books to read.

What Problems Have I Found

Example: I found that village students have very limited access to good books as there are very few libraries or bookstores in village.

What Connections/People Do I Know?

Example: My cousins grew up in a village and can share about their own experiences. My university has a partnership with a nearby village school that we can reach out to.

What Ideas Do I Have?

Example: I have an idea about "read a book, pass a book", whenever you finish reading a good book, you can pass it to certain schools in the village through an online platform and allow more children to be able to have good books.

Day 2

Investigate the Problem

Now that you have selected a theme and identified a problem domain, in this next step, you will learn more about the people affected by this problem (also called stakeholders). Through these guided activities, you will develop greater empathy for these stakeholders and a deeper understanding of the problem that you seek to address.

1. Online Research or Interviews

Based on the problems you have identified yesterday, do some research on the people and stakeholders who are most deeply affected by this problem and stands to benefit from your solution. Alternatively, you can conduct an interview with a stakeholder. Interviews are one of the best ways to help you understand the real needs and concerns of the people who are affected by the problem you are tackling.

SUGGESTED TIME:
20 minutes (Online Research)
20 minutes - 1 hour (interviews)

2. Create a Persona

Create a persona to understand and empathize with the people who are directly affected by the problem you are tackling and other stakeholders, such as beneficiary groups, supporters, and funders.

SUGGESTED TIME:
20 minutes

3. Problem Summary

In a group, complete the problem summary statement.

SUGGESTED TIME:
30 minutes

4. Prepare for Day 3

By the end of today, you should have developed a deeper understanding of the problem you are solving, finalized a persona of someone you want to help, and summarized your insights into a problem summary. Be ready to show your persona (p38) to your mentor and verbally show your problem summary in about 1 minute.

1. Research Guide

Online Research

Based on the problems you have identified yesterday, do some research on the people and stakeholders who are most deeply affected by this problem and stands to benefit from your solution. Collect data / stories to help you to understand your stakeholders.

Note: If your team has more than 5 people, split into two smaller groups and complete step 1 and 2 in small groups, then share your results together in step 3.

Who is affected by the problem? Are there different groups of stakeholders?

Kids and young children

How big is the population affected?

In what way they are affected by the problem? How severe is it?

What are current solutions and how do they feel about it?

What are their aspirations and needs in terms of solving the problem?

Or Interviews

As an alternative or in addition to online research, you can conduct an interview with a stakeholder. Interviews are one of the best ways to help you understand the real needs and concerns of the people who are affected by the problem you are tackling. It provides you with insights that can be part of your solution. If you have the time or access to such interviewees, we encourage you to reach out to conduct a short interview. Here are some questions you can include:

Basic background and demographic information

How does this problem affect you?

When, where, how frequently does the problem happen?

What do you think causes the problem?

What's your current solution? Does it solve your problem?

What are the most frustrating aspects of the current solutions?

If you could do anything about it, what would you do?

2. Persona

Use this persona framework to understand and empathize with the people who are affected by the problem you are tackling. Use the information you get from desk research and interviews to map out their perspective and needs. You can also use this to empathize with other stakeholders, such as beneficiary groups, supporters, funders, etc.

Basic Info

NAME

AGE

LOCATION

EDUCATION

OCCUPATION

RELATIONSHIP STATUS

VALUES

ADD SKETCH OR PHOTO

DAILY ROUTINE

HOBBIES

Needs & Pains

Solutions

3. Problem Summary

Share your persona with the team. If you have multiple personas, you can select one of them or try to combine, rewrite and finalize a persona to be your target group.

Now that you have empathized with the stakeholders and investigated the issues, summarize everything you have discovered about the problem by answering these three questions.

What is the key problem you are trying to address and why is it important?

Who is affected by this problem?

What are the causes of this problem?

Day 3

Brainstorm Solutions

Once you have identified and investigated the problem, it is critical to take time to survey existing solutions to see how other people are tackling this challenge. That way, you can learn from existing solutions, identify any gaps, and think about how your solution can be different or better.

1. Market Analysis

Before coming up with your own solutions, it's important for you to understand what is already on the market. What are some successful examples or failed ones that you can learn from? Use the template on the next page to collect and analyze existing solutions in your own country and globally.

SUGGESTED TIME:
15 minutes (individual research)
15 minutes (group sharing)

2. Group Ideation

During this group ideation process, each person should brainstorm and come up with as many as ideas that would address the problem you have identified. The key is not to spend too much time on a single idea. You should refrain from expressing judgment of any ideas presented to encourage the free flow of all sorts of random and unusual ideas – the more, the better!

SUGGESTED TIME:
30 minutes

3. Ideas Prioritization Matrix

After you have completed the brainstorming process, organize your ideas using the Ideas Matrix and see which are the most valuable and feasible ideas. Vote for one idea that your team wants to explore deeper and work on together.

SUGGESTED TIME:
15 minutes

4. Prepare for Day 4

Be ready to show your Ideas Prioritization Matrix (p44) to your mentor and clearly articulate how you reached to the coordinates of different ideas.

DAY 3

1. Market Analysis

	Technology Involved	Benefits	Shortcomings
SOLUTION 1			
SOLUTION 2			
SOLUTION 3			
SOLUTION 4			
SOLUTION 5			

2. Group Ideation

DAY 3

Draw or write down as many ideas as you can to address the problem you've identified

DAY 3

3. Idea Prioritization Matrix

	Low Effort	High Effort
High Impact	GREAT! GO FOR IT!	GOOD. HOW MIGHT YOU REACH THE SAME IMPACT WITH LESS EFFORT?
Low Impact	WEAK. HOW MIGHT YOU INCREASE YOUR IMPACT?	BAD. FOCUS ON OTHER IDEAS.

Day 4

Define Success

Now that you have a good grasp of existing solutions and brainstormed potential solutions, you are ready to further develop your own unique idea to address this problem. To do so, you would also need to define success and think through the business model of your idea to make sure that it is feasible and sustainable.

1. Hypothesis and Idea Framework

Create a solution hypothesis for the idea that your team has voted on. Then answer the questions in the idea framework to further clarify all the aspects of your idea.

SUGGESTED TIME:
15 minutes

2. Define Success

For an idea to become reality, you would need to think through the different aspects that would make this solution a financially sustainable operation.

SUGGESTED TIME:
30 minutes to 1+ hour

3. Business Model Canvas

The Business Model Canvas is a way for you to strategically communicate your business idea and concept in a straightforward, structured way.

SUGGESTED TIME:
30 minutes to 1+ hour

4. Prepare for Day 5

Be ready to show your Business Model Canvas (p49) and verbally share your business blueprint and fundraising plan to your mentor.

DAY 4

1. Hypothesis and Idea Framework

Who?	What?	When?
Where?	**Why?**	**How?**

Hypothesis

Example: Tarjimly will solve the problem of language barriers for refugees and aid workers through crowdsourcing translations because there are enough multilingual individuals to make a dent in this problem.

PRODUCT/SERVICE _____ **will solve the problem of** PROBLEM _____

through SOLUTION _____ **because** REASON _____

2. Define Success

As a group, discuss:

- What would success look like?
- What changes are (or likely to be) experienced as a result of what we do?
- What do we need to do next to make this idea a reality? Consider funding, legal, marketing, partnership and technology needs.

Funding: Will you be for profit, social enterprise, or a nonprofit? What might be potential revenue streams or funding sources?	**Marketing & Partnerships**: How will you reach your ideal users? Who can you work with as partners?
Legal: What laws or policies may affect you?	**Technology**: What patents might be involved? What might be barriers to entry?

DAY 4

Social Business Model Canvas

Value Proposition

WHAT ARE YOU OFFERING TO THE WORLD? WHAT PROBLEMS ARE YOU SOLVING FOR YOUR CUSTOMERS?

Customers

WHO WILL YOUR PRODUCT OR SERVICE AFFECT?

USERS

BENEFICIARIES

PAYERS

Channels

HOW WILL YOU REACH YOUR CUSTOMERS? HOW WILL YOU BUILD AND MAINTAIN THOSE RELATIONSHIPS?

Activities

WHAT ARE SOME KEY ACTIVITIES REQUIRED? (PRODUCTION, PROBLEM SOLVING, OR PLATFORM/ NETWORK)

Partners/Resources

WHO WILL YOUR PRODUCT OR SERVICE AFFECT?

PEOPLE

OBJECTS

FINANCIAL

INTELLECTUAL

Costs

WHAT ARE THE MAIN COSTS FOR YOU TO HAVE CUSTOMERS, ACTIVITIES, RESOURCES?

Revenue Streams

HOW AND WHAT ARE CUSTOMERS PAYING?

Profits

HOW WILL YOU RE-INVEST YOUR SURPLUS?

Inspired by The Business Model Canvas and the Young Foundation Social Business Model Canvas

Day 5

Prepare Your Pitch

Congratulations for coming up with your unique solution! Over these two days, take some time to organize your thoughts and practice your pitch.

1. Create a Pitch Deck

Prepare to share your idea in a pitch deck using the guidelines in the following pages. In the Google Drive Folder, there is a previous winning team pitch as an example.
Here's a suggested format:

1. Cover Page
2. Problem
3. Solution
4. Product Walk-Through
5. Definition of Success & Next Steps

2. Practice Your Presentation

Here are some presentation tips:

- Use pictures of your product, pictures from the field, pictures of your team, flowcharts, relevant cartoons, etc.
- Leverage the Smart Art feature from Power Point to include lists, tables, flowcharts, processes, graphs, growth.
- Use bullet points and short sentences.

To Submit Your Pitch Deck:

1) Draft a 5-page pitch deck using Google Slides.

2) Before pitches begin on Day 8, upload your group's Google Slides to this Google Drive Folder. Please be sure to name your slides in the format of "Pitch_Class #_Group #".

3) Please only submit one copy of the pitch deck.

During the Pitch:

Only 1 team member should be in charge of delivering the pitch and 1 team member be in charge of sharing screen.

1. Create a Pitch Deck

Cover

Your Cover Page should include:

- Company/Product Name
- Tagline: Announce your big idea (a 1 sentence summary of your project)
- Group # & Team Name

Problem

Summarize the problem that you are solving in one sentence. Explain why it is important from the perspective of the user and for the broader society or environment.

- Share data or factual information on the problem that you are solving.
- Share why this problem is important to the user (your persona).

Solution

Explain your solution in one sentence. Describe how it is different or better than existing solutions.

- Explain your solution in one sentence using your solution hypothesis.
- What are the major benefits of your solution compared to existing solutions? (For example, are current solutions slow, expensive or difficult to use? Are your solutions faster, cheaper and easier to use? Do customers care?)

Product

Make your product more tangible by illustrating how it works in three simple steps. You may use a sketch, screenshots, graphics and/or video.

- Who are the users and how are they interacting with the problem?
- Illustrate how the product works and the technology that is involved.
- How is this solution is going to solve their problem?

Next Steps

Share about what success looks like for you and how you will get there.

- What would success look like? What kind of changes could we expect if your idea is successful?
- What are the next steps for your idea? Consider funding, legal, marketing, partnership and/or technology aspects.

2. Practice your Presentation

Write down your key points in 5 bullet points

Draft a presentation script.

The average person speaks 150-160 words per minute. To ensure that you will be able to cover all that you want to say within 4 minutes, write a script that is between 600 - 640 words long.

Pitch References

Dost Education

Website: Dost Education

Pitch: Sneha Sheth, CEO at MIT Solve

The Renewal Workshop

Website: The Renewal Workshop

Pitch: Nicole Bassett, Co-Founder at MIT Solve

Algramo

Website: Algramo

Pitch: José Manuel Moller, CEO at MIT Solve

AUGMENTx

Website: AUGMENTx - MIT Solve Solutions

Pitch: Dr. Albert Kwon, Co-Founder at MIT Solve

See “Additional Resources” in the appendix for more resources.

Day 6-7

DAY 6-7
OPTIONAL

Prototype Your Idea

Bring your draft of pitch and be ready to rehearse.

Going from idea to product can be a messy process. Prototypes can help you communicate your vision, get feedback on your ideas early on, and reduce the risk of building something that no one will use. There are a wide spectrum of prototypes. They do not need to be functional, but are meant to help visualize the user experience of the final product. Here are a few ways you can begin to prototype, test and validate your ideas with potential users.

1. Prepare to Gather Feedback

SUGGESTED TIME:
30-60 minutes

Before you begin prototyping, define what aspects of your idea you would like to validate.

2. Create a Prototype

SUGGESTED TIME:
60-120 minutes

If you are designing a digital product, create a mock-up of the interface with prototyping software, powerpoint slides, or even a pencil and paper. If you are designing a physical product, what objects can you quickly hack together to help a potential user understand the potential form or function of your product?

If you are designing a service, create a website or flyer that describes the details of your service. You can use pictures or videos of existing places or experiences to help people understand what your experience might be like.

3. Create a Product Walkthrough

SUGGESTED TIME:
30-60 minutes

Once you have settled on an idea, as a team, prepare a product walkthrough that takes the user through the steps that they need to take in order to complete key tasks within the product.

1. Prepare to Gather Feedback

DAY 6-7
OPTIONAL

What: Break down the features or experiences within your product.

Why: Prioritize and rank the experiences. Which features are the most central to the product experience?

Who: List out 3-5 people or groups who match the persona you created on Day 2. Write down their names and contact information, and schedule a time for a quick conversation with them.

Questions: List out 5 questions that you would like to ask a potential user about the product.

2. Prototype Your Solution

DAY 6-7
OPTIONAL

Digital Product

What goals will the user achieve through your product and how will they meet these goals? Map out and sketch these user flows with basic boxes or placeholder images and text. If you have time, you can turn these sketches into low-fidelity prototypes on software such as Protopie or Marvel. You can also create simple functional prototypes with no-code tools such as Bubble or web builders such as Wix.

Learn More

- Digital Product Prototyping -- what's it all about?
- Intro to Digital Prototyping

Physical Product

Physical product prototypes can be used to explore form or function or both. To explore form, use whatever is around you (such as paper, string, recycling, tape) to quickly create a "looks-like" prototype so that you can get feedback on how it feels when someone is using it. To explore function, use tools such as arduino to quickly create a "works-like" experience that demonstrates how the product might work. If you have time, you can create a "looks-like works-like" prototype with functioning electronics -- but it is completely fine to create separate prototypes early in the process. The key is to be able to gather feedback that will inform the direction of your product design.

Learn More

- How to Go from Idea to Prototype in One Day
- How to Make a Product Prototype
- Adam Savage's One Day Builds

Service

What are the steps will people go through? What kind of experience should people expect to have? To prototype a service, you can create materials such as a flyer to simulate your service offerings, or role play

Learn More

- 6 Tips for Prototyping a Service Design Experience
- Role Playing

3. Create a Product Walkthrough

DAY 6-7
OPTIONAL

Preparing the Walkthrough

What steps will the user take to interact with your product?
If you have mapped out your user flow, use it as a basic chronological outline to help you structure your walkthrough.

What are the top 3 "wow" moments in your product?
What are the top 3 aspects of your product that will make people think, "Wow!"? Skip screens such as set up, log in, or configuration, and highlight your top 3 wow moments.

Questions to Answer

How will your product impact your intended user?
Start with one sentence that will help the audience envision what life with your service or product could be like.

How will your product create this impact?
Click through the flow of the top feature(s) that will achieve the primary purpose of your product.

How will your product delight the user?
Show your audience one feature will help the user achieve their goal that may be fun or unexpected.

Day 8

Judging Criteria

All five criteria will be weighted equally in the scoring. The total score will be out of 25. If there is a tie, the project with the higher score in Category D: Creativity and Innovation will be used as the tie-breaker, followed by Category B: Strength of Solution/Product.

Criteria A: Problem Identification

1. Does the team make a compelling case for the importance of the problem they are tackling?
2. Does the team have a clear understanding of the actual problem that is backed by research?
3. Does the team demonstrate a deep understanding of key stakeholders/users affected by the problem and their needs?

Criteria B: Strength of Solution/Product

1. Does the team have a solution with a unique value proposition that brings about meaningful social or environmental change if successful?
2. Is technology effectively and appropriately applied in this solution?
3. In the solution walk-through/demo, has the team clearly explained the scenarios and assumptions of the project?

Criteria C: Business Model & Feasibility

1. Does the team have an idea of how they would be able to generate revenue or fundraise for the project to ensure the financial sustainability of the project?
2. Is the business model that the team chose (for-profit, nonprofit, or social enterprise) appropriate to the project?
3. Has the team considered any major risks that would affect the feasibility of the project?

Criteria D: Creativity and Innovation

1. Did the team challenge themselves to push creative boundaries beyond existing market solutions?
2. Did the team tie back insights or research gathered into their solution?
3. Is the solution innovative in terms of its application of technology?"

Criteria E: Style and Clarity of Presentation

1. Delivery - Is the message clearly conveyed and well articulated?
2. Materials - Do the presentation materials and/or visuals (including any sketches or demo) provide clear support to the presentation?
3. Control of time - Did the team had a good control of the time and answer the questions adequately?

Judging Rubric

Criteria A: Problem Identification

1: Poor
Did not address the problem or misidentified the problem
2: Limited/Unclear
Partially addressed the problem
3: Average
Addressed all the areas of problem identification on a basic level
4: Good
Addressed all the areas of problem identification with supporting evidence
5: Excellent
Addressed all the areas of problem identification in a clear manner with compelling evidence and convincing research

Criteria B: Strength of Solution/Product

1: Poor
Did not provide a solution with the right technology
2: Limited/Unclear
Partially provided a solution with technology but with limited clarity or problematic assumptions
3: Average
Provided a solution with the right technology and explained the solution in a basic level)
4: Good
Provided a unique solution with the right technology with a reasonable walk-through
5: Excellent
Provided a meaningful and unique solution with an effective technology with compelling evidence and logical walk-through

Criteria C: Business Model & Feasibility

1: Poor
Did not understand the business model of the project
2: Limited/unclear
Partially addressed the business model but with limited clarity or problematic assumptions
3: Average
Provided a business model in a basic level
4: Good
Provided a solid business model with reasonable assumptions
5: Excellent
Provided a well-thought out business model with compelling evidence

Criteria D: Creativity and Innovation

1: Poor
Did not demonstrate any critical thinking
2: Limited/Unclear
Partially demonstrated some critical thinking but very similar to existing solutions
3: Average
Demonstrated some creativity on a basic level, showing some improvements over existing solutions
4: Good
Demonstrated creativity and innovation in technology, showcasing something that is not commonly seen in existing market
5: Excellent
Demonstrated great innovation and creativity, showcasing something that has rarely been seen in existing market

Criteria E: Style and Clarity of Presentation

1: Poor
Missing materials or incoherent delivery
2: Limited/Unclear
Partially understandable presentation and materials
3: Average
Presentation was understandable on a basic level
4: Good
Clear delivery and materials, good control of time
5: Excellent
Professional quality delivery, materials, and control of time

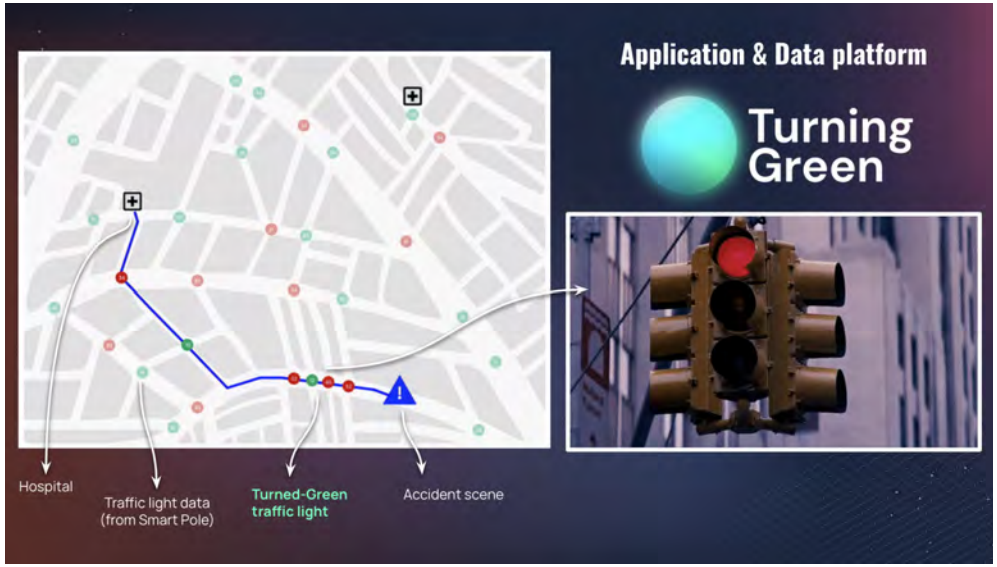
Example of Top Seeds for the Future Projects

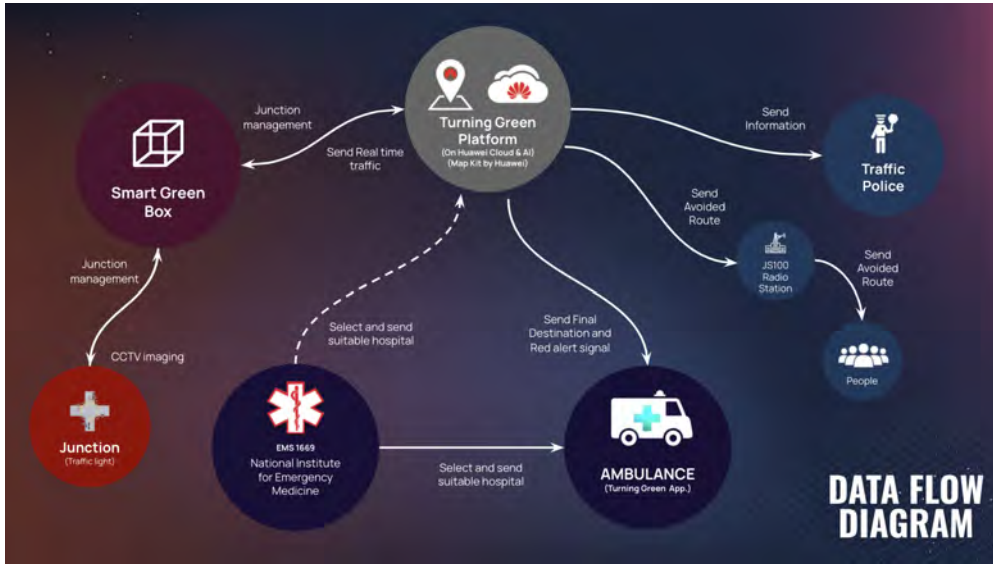
Project Name: Turning Green

View Live Pitch

Project by Team R U Ok? from Thailand
Team Members: Achittaphon Wuttipanyarattanakul, Chanisa Phopanao, Chawanluk Charoensiri, Karit Sookpreedee, Korndanai Eiamsherangkoon, Parit Jongharn, Patcharin Boonsomchua, Thitipong Phawadee

20% of patients die before reaching the hospital in Thailand due to traffic jams. On average 67.8% of ambulances in Thailand are involved in collisions due to other vehicles running through red lights. Turning Green are smart traffic lights to help paramedics reach patients more quickly to decrease death rates during transportation due to traffic jams.





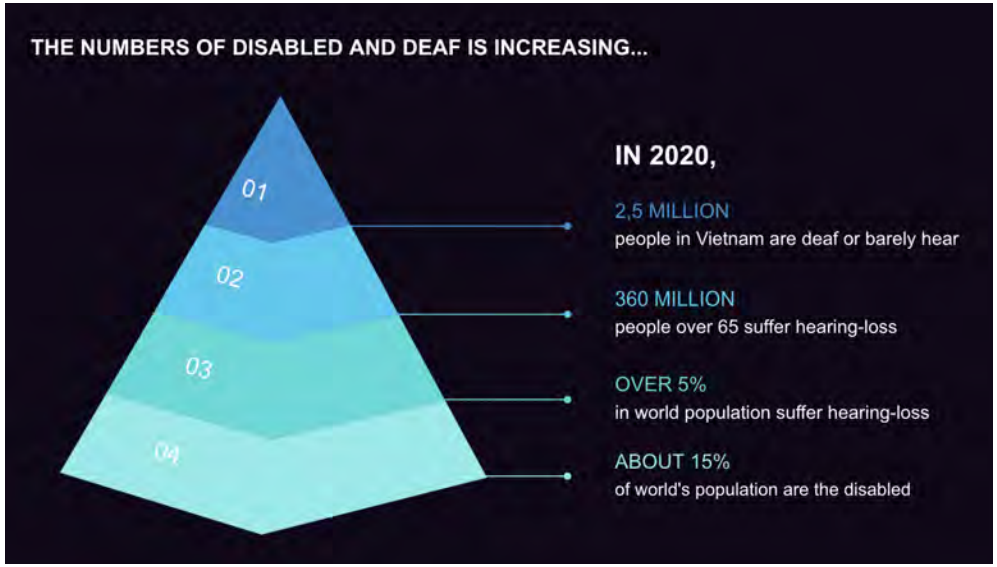
Example of Top Seeds for the Future Projects

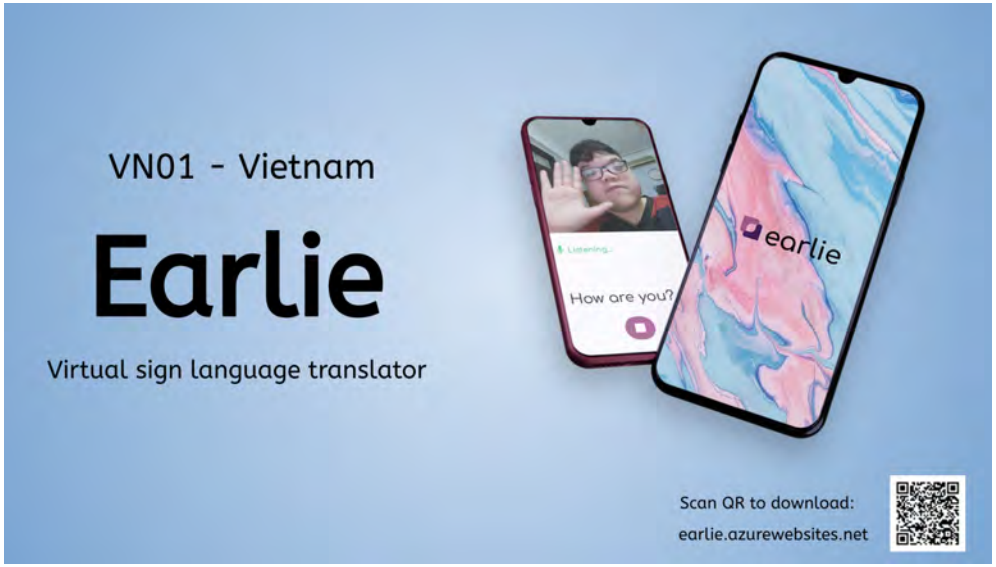
Project Name: Earlie

View Live Pitch

Project by Team VN01 from Vietnam
Team Members: Dang Le Tuong Vy, Nguyen Hoang Hai, Nguyen Viet Phuong

In 2020, 2.5 million people in Vietnam are deaf or hard of hearing. However, there is a lack of mobile applications to support deaf communications and a shortage of deaf translators at an affordable price, causing difficulty in communicating with the deaf in working or studying environments. Earlie is a virtual sign language translator to close the divide between the hearing and the deaf, wherever you are, whatever language you speak.





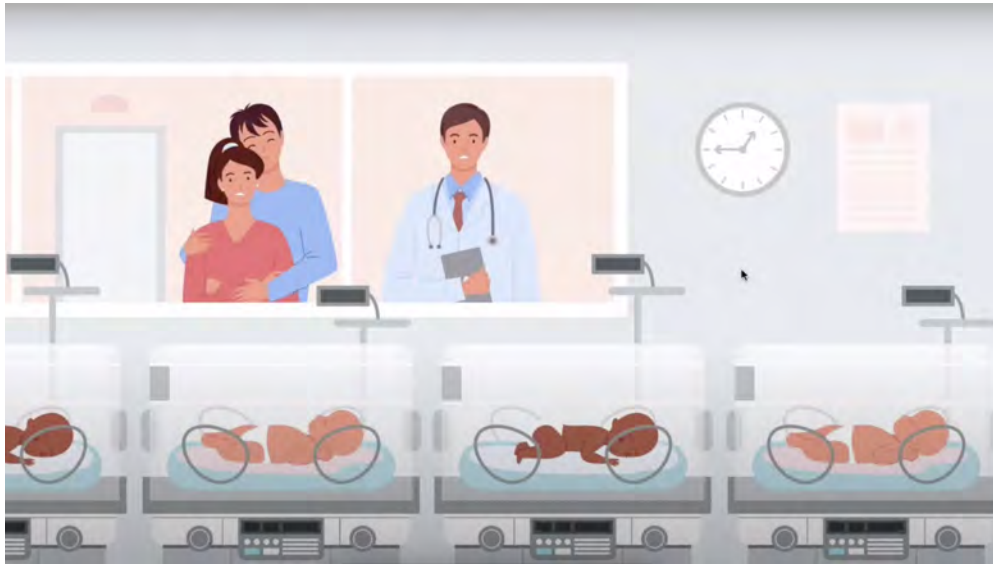
Example of Top Seeds for the Future Projects

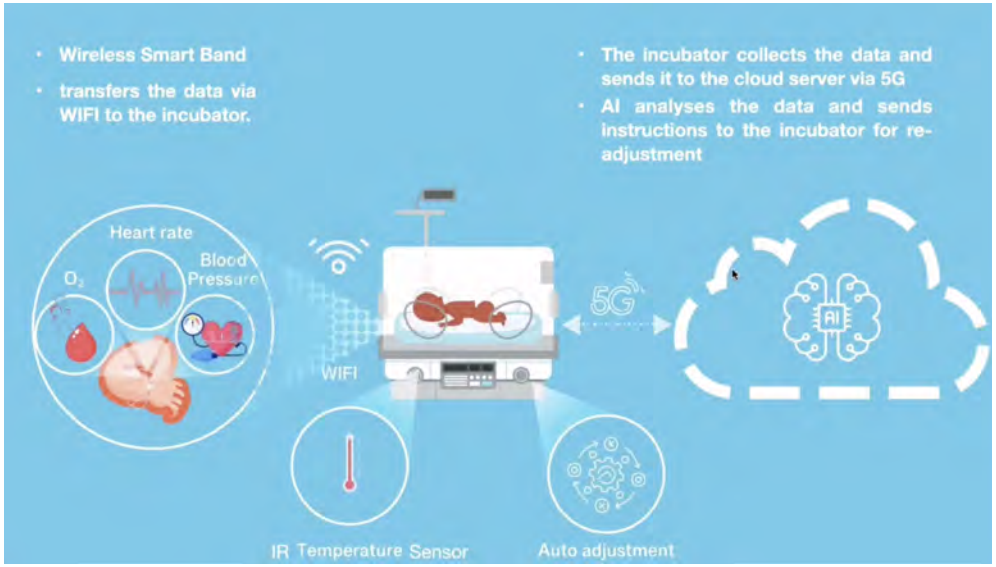
Project Name: Smart NICU

View Live Pitch

Project by Team Binary Brains from Libya
Team Members: Amnna Abdulwahid Hamid FARHAT, Emhimmid Kamal Emhimmid BILHAJ ALI, Ezuldeen Saeid Awadh HUSAYN, Faraj Khalid Amabrouk ABDULKARIM, Hamza Bashir Elhadi ABOSHHIWA, Mahdi Hasan Hamad ABDULJALIL, Mohamed Ibrahim Mohamed ALFEGI, Zakaryia Miftah Husayn ABDULQADIR, Abdullah Fauzi Abdallah HABBERRIH, Abdulhakim Mohammer Salim ABUGHALYAH, Abdulhameid Hussein Mohamed ABUZGAIA

Half of the babies born 2 months early die due to a lack of feasible, cost-effective care for warmth control, breathing difficulties, lack of real time alerts, or infection. Smart NICU is a neonatal intensive care unit that automates the adjustment of temperature and oxygen levels. and alerting a nurse in case the oxygen level in baby's blood indicates an emergency.





Appendix

Additional Resources

Inspiration

10 Most Innovative Not-for-Profit Organizations of 2021

Blueprint for Business Leadership on the SDGs

AI for Sustainable Development Goals

Unleashing the Power of AI for Education

The Path to 2030: Sustainable Development Goals (SDGs) & IoT

Cyber China: From Tech to the Imagination

Creating More Sustainable and Responsible Businesses

Deloitte Tech Trends 2021

Tools

Yunus Youth Social Business Toolkit

PeaceFirst Peacemaker Manual

Global Changemaker Toolkits

Anti-Food Waste Campaign Toolkit

The Beginner's Guide to Usability Testing

Wireframe Design Guide

How to Prototype Your VR Project Without Code (AdobeXD)

How to create prototypes for AR using Keynote and a smartphone (UXDesign)

Marvel - No Code App Prototyping

Bubble - No Code Web Apps

Mighty Networks - Community Platform

Pitch Deck Resources

Presentation Content:

How to Write an Effective Problem Statement

Seriously, what's your (startup's) problem?

How to craft a problem statement that VCs will love

Fundraising Part II: Investors, the Pitch, and the Deal (Unusual Ventures)

The Ideal Email Deck (Elizabeth Yin)

Writing a Business Plan (Sequoia)

Presentation Makers:

Beautiful.ai

Prezi

Canva

FAQs

View all FAQs

What if I cannot contact my team members or they are not active in this group project?

When you're first connected with other team members during the kick-off session, please **exchange contact information** (WhatsApp, phone number, etc) and **schedule your teams's offline/online meetings** to complete the daily activities.
To facilitate strong teamwork, we suggest that each team properly l**earn about each teammate's background and interests, draft a clear division of work from the start, and select a designated platform that ensures active and promp communication** within the team during the 8-day program.

If your team members still disappear or are not active in the group project, please **inform your Huawei local coordinator immediately**.
We suggest you **take ownership** of this project if your team members don't contribute. In some ways it means more work for you, in other ways it means that you have a great opportunity to tackle the problem that you care the most.
Good teamwork is a combination of effort and luck. One of the Global Top 3 teams from Global Competition 2021 has as few as 3 team members. Team size ranges from 3 to 11 among Global Top 11 teams. Bigger teams benefit from flourish ideas while smaller teams may have the advantage in mobility and efficiency.

How is my group formed?

Your group is pre-formed with many factors such as gender distribution and specialized fields of study taking into account. Each group includes 5 -10 members.

How often should I meet with my group outside the live sessions to work on our idea?

We strongly suggest that teams meet for 1-2 hours outside of live sessions to complete the daily activities and work on the project. The daily activities are designed for you and your team to complete in 1-2 hours per day.

What is a Winning Project of the Class?

The Winning Project of the Class is selected by a team of judges on Day 8 Pitch Day. You can find the judging criteria in your Playbook. The Winning Project of each Class will have access to 3 additional sessions of mentorship that help the team further develop the idea and better prepare for the Global Competition.

Who are the judges?

The judging panel will include leaders from Huawei, and practitioners and experts from the broader social innovation and social impact sectors.

FAQs

View all FAQs

Where can I access group recordings or slides?

We will record only Day 1 and Day 8 for each class. Please reach out to your local coordinator or Huawei Seeds team through seeds@huawei.com. For the other days, no recordings will be taken so each group can fully focus on teamwork and discussion. If you think the contents or suggestions provided by the mentor are super important, please make sure you have a notebook to jot the inspirations down.

Is attendance mandatory?

Attendance to all live sessions will guarantee maximum learning outcomes. It is required to attend all live sessions and fully utilize the resources at your experience during the Tech4Good program. If there's any emergency that you can't join the session, please make sure you let Huawei local coordinator or PIM staff know. No Graduation Certificate will be issued if you skip a session without notification.

Do you offer special accommodations / special needs?

Huawei Seeds of the Future and PIM Team are dedicated to creating an inclusive and encouraging learning environment for all participants. Please feel free to email t4g@pimchina.org (cc: seeds@huawei.com) with your needs and ideas so that the TechforGood Program could provide a more accommodating experience for you.

Where, when, and how should I submit my group's idea?

We are collecting your group project before the presentations for the judges' and Seeds team's reference.

1. Please follow the guidelines in your Playbook to put together your group's final presentation.
2. Draft a 4-page presentation (5 pages if Title Page is included) using Google Slides.
3. Before Day 8 Pitch Day, upload your group's Google Slides to this Google Drive Folder. Please be sure to name your slides in the format of "Presentation_Class #_Group #".
4. Each group should only submit one copy of the presentation Google Slides.

Is there mentorship on the technology side of the idea?

The focus of the Tech4Good program is for you to understand a specific real-world challenge and find a technology-based solution. The technology side of the idea does not have to be fully developed. Sometimes, the best ideas are very simple in nature, which is what makes these ideas also scalable. You will not receive specific mentorship on the technology side of the idea.

About PIM

Purpose in Motion (PIM) is the official partner for Huawei Seeds for the Future 2021 Tech4Good program. Founded in 2013, PIM is an international social enterprise that aims to empower young people with the education, resources, and networks to become mission-driven leaders and effective changemakers. PIM partners closely with universities, community organizations, and practitioners to deliver "learning by doing" education programs for young people, with a focus on innovation and socially responsible leadership.

Learn more at pimglobal.org.
Follow us on LinkedIn: linkedin.com/company/purposeinmotion

HUAWEI X PIM
SEEDS FOR THE FUTURE TECH4GOOD

Questions? Contact seeds@huawei.com or t4g@pimchina.org