Knights Edition

Summer 2022
Accelerated Innovation &
Entrepreneurship Bootcamp

Session 6 Finding a Challenge

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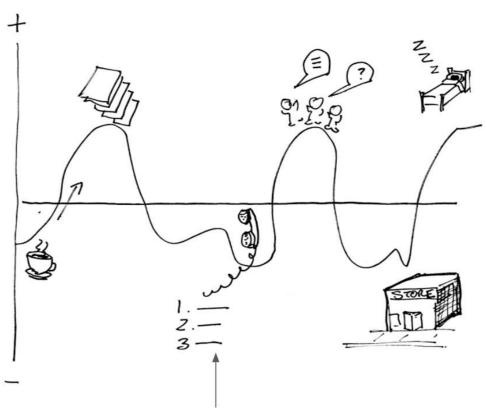






RECAP

DESIGN THINKING?



Your "day in the life" map might look a bit like this.*

* Be visual and add short descriptive notes for each moment too.















CLEAN WATER AND SANITATION

RESPONSIBLE CONSUMPTION AND PRODUCTION



ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

BEFORE COVID-19

PROGRESS IN MANY HEALTH AREAS CONTINUED, BUT

NEEDS ACCELERATION

















HEALTHCARE DISRUPTIONS COULD

REVERSE DECADES OF IMPROVEMENTS





THE PANDEMIC HAS

INTERRUPTED **CHILDHOOD IMMUNIZATION PROGRAMMES** IN AROUND









WILL LEAD TO 100% INCREASE

SERVICE CANCELLATIONS

IN MALARIA DEATHS IN SUB-SAHARAN AFRICA





3 GOOD HEALTH AND WELL-BEING



Ensuring healthy lives and promoting well-being at all ages is essential to sustainable development. Currently, the world is facing a global health crisis unlike any other — COVID-19 is spreading human suffering, destabilizing the global economy and upending the lives of billions of people around the globe.

Before the pandemic, major progress was made in <u>improving the health of millions of people</u>. Significant strides were made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality. But more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues. By focusing on providing more efficient funding of health systems, improved sanitation and hygiene, and increased access to physicians, significant progress can be made in helping to save the lives of millions.

Health emergencies such as COVID-19 pose a global risk and have shown the critical need for preparedness. The United Nations Development Programme highlighted huge disparities in <u>countries' abilities to cope with and recover from the COVID-19 crisis</u>. The pandemic provides a watershed moment for health emergency preparedness and for investment in critical 21st century public services.



ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

BEFORE COVID-19

PROGRESS TOWARDS —

INCLUSIVE AND EQUITABLE QUALITY **EDUCATION WAS TOO SLOW**



OVER 200 MILLION CHILDREN WILL STILL BE OUT OF SCHOOL IN 2030

COVID-19 IMPLICATIONS



SCHOOL CLOSURES KEPT

90% OF ALL STUDENTS OUT OF SCHOOL

REVERSING YEARS OF PROGRESS ON EDUCATION



IN LOW-INCOME COUNTRIES, CHILDREN'S SCHOOL COMPLETION RATE IS



79% IN RICHEST 34% IN POOREST 20% OF HOUSEHOLDS 20% OF HOUSEHOLDS

REMOTE LEARNING REMAINS **OUT OF REACH FOR** AT LEAST **500 MILLION STUDENTS**



ONLY 65% OF PRIMARY SCHOOLS

HAVE BASIC HANDWASHING FACILITIES CRITICAL FOR COVID-19 PREVENTION

4 QUALITY EDUCATION



Education enables upward socioeconomic mobility and is a key to escaping poverty. Over the past decade, major progress was made towards increasing access to education and school enrollment rates at all levels, particularly for girls. Nevertheless, <u>about 260 million children were still out of school</u> in 2018 — nearly one fifth of the global population in that age group. And more than half of all children and adolescents worldwide are <u>not meeting minimum proficiency standards</u> in reading and mathematics.

In 2020, as the COVID-19 pandemic spread across the globe, a majority of countries announced the temporary closure of schools, impacting more than 91 per cent of students worldwide. By April 2020, close to 1.6 billion children and youth were out of school. And nearly 369 million children who rely on school meals 2 needed to look to other sources for daily nutrition.

Never before have so many children been out of school at the same time, disrupting learning and upending lives, especially the most vulnerable and marginalised. The global pandemic has far-reaching consequences that may jeopardize hard won gains made in improving global education.





BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

BEFORE COVID-19

MANUFACTURING GROWTH



COVID-19 IMPLICATIONS

THE AVIATION INDUSTRY HAS SUFFERED THE STEEPEST DECLINE IN HISTORY



AIR PASSENGER NUMBERS FELL BY 51% FROM JANUARY TO MAY 2020 (COMPARED TO THE SAME PERIOD IN 2019)

FINANCING FOR

SMALL-SCALE INDUSTRIES

IS NEEDED FOR THEIR SURVIVAL THROUGH THE CRISIS



ONLY 35% HAVE ACCESS

TO CREDIT IN DEVELOPING COUNTRIES (2006-2018)

INVESTMENT IN R&D

IS GROWING BUT NEEDS TO ACCELERATE



\$1.4 TRILLION \$2.2 TRILLION

FEWER THAN 1 1 5 PEOPLE USE THE INTERNET IN LDCs (2019)





SUSTAINABLE CITIES AND COMMUNITIES



MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE. SAFE, RESILIENT AND SUSTAINABLE

BEFORE COVID-19

SHARE OF URBAN POPULATION

LIVING IN SLUMS ROSE To 24% **№** 2018

COVID-19 IMPLICATIONS



ONLY HALF

THE WORLD'S URBAN POPULATION HAS CONVENIENT ACCESS

TO PUBLIC TRANSPORT [2019]







100







SUSTAINABLE CITIES AND COMMUNITIES



The world is becoming increasingly urbanized. Since 2007, more than half the world's population has been living in cities, and that share is projected to rise to 60 per cent by 2030.

Cities and metropolitan areas are powerhouses of economic growth—contributing about 60 per cent of global GDP. However, they also account for about 70 per cent of global carbon emissions and over 60 per cent of resource use.

Rapid urbanization is resulting in a growing number of slum dwellers, inadequate and overburdened infrastructure and services (such as waste collection and water and sanitation systems, roads and transport), worsening air pollution and unplanned urban sprawl.

The impact of COVID-19 will be most devastating in poor and densely populated urban areas, especially for the one billion people living in informal settlements and slums worldwide, where overcrowding also makes it difficult to follow recommended measures such as social distancing and self-isolation.

The UN food agency, FAO, warned that hunger and fatalities could rise significantly in urban areas, without measures to ensure that poor and vulnerable residents have access to food.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Worldwide consumption and production — a driving force of the global economy — rest on the use of the natural environment and resources in a way that continues to have destructive impacts on the planet.

Economic and social progress over the last century has been accompanied by environmental degradation that is endangering the very systems on which our future development — indeed, our very survival — depends.

A few facts and figures:

- Each year, an estimated one third of all food produced equivalent to 1.3 billion tonnes worth around \$1 trillion ends up rotting in the bins of consumers and retailers, or spoiling due to poor transportation and harvesting practices.
- If people worldwide switched to energy efficient light bulbs the world would save US\$120 billion annually.
- Should the global population reach 9.6 billion by 2050, the equivalent of almost three planets could be required to provide the natural resources needed to sustain current lifestyles.

The COVID-19 pandemic offers countries an opportunity to build recovery plans that will reverse current trends and change our consumption and production patterns towards a more sustainable future.

<u>Sustainable consumption and production</u> is about doing more and better with less. It is also about decoupling economic growth from environmental degradation, increasing resource efficiency and promoting sustainable lifestyles.

Sustainable consumption and production can also contribute substantially to poverty alleviation and the transition towards low-carbon and green economies.



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

BEFORE COVID-19

THE WORLD CONTINUES TO **USE NATURAL RESOURCES**

UNSUSTAINABLY



GLOBAL MATERIAL FOOTPRINT

GLOBAL MATERIAL FOOTPRINT 73.2 BILLION TONS - 85.9 BILLION TONS

COVID-19 IMPLICATIONS

THE PANDEMIC OFFERS AN OPPORTUNITY TO

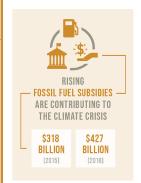
DEVELOP RECOVERY PLANS

THAT BUILD A MORE SUSTAINABLE FUTURE



79 COUNTRIES AND THE AT LEAST ONE POLICY TO PROMOTE SUSTAINABLE CONSUMPTION AND PRODUCTION











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_____13.8% _____

OF FOOD IS LOST IN SUPPLY CHAINS (2016)

Explore a challenge within your chosen SDG.

10 minutes

Exercise

Open Brief

Find a worthwhile problem or user need (not an idea or solution) to explore

To invent, you need a good imagination and a pile of junk.

- Thomas Eddison

- Talk about each brief and take notes as a team.
- Discuss **challenges** that need to be overcome, **and opportunities**.
- Give people time to **think** individually.

CHOSIGA ERIF

WHY?

It's all about asking the right

WHY WHY WHY WHY WHY

Exercise

- Talk about each brief and take notes as a team.
- Discuss **challenges** that need to be overcome, and *opportunities*.
- Give people time to think individually.
- Ask the **5 whys.**
- Predict ideal future scenarios.

TASK 1

Start filling in 'Early Thoughts' in the Playbook and thinking about any SDG/theme you might be interested in.

This is not final!

20 mins







Finding a challenge

Starts with ____

Starts with desk research.

Market Research.

aka Secondary

What is secondary research?

secondary research is

Studies and research that is **done by a second-party** (not you),
usually for a different purpose.

Discuss

What sources of secondary research can you use?

Science journals

News articles

- Market reports*
- Documentaries
 - Independent research

Books

- Find the references mentioned in news articles or multiple sources.
- ·

Always use verified sources.

scholar.google.com

Big pictureData driven

Secondary research is usually:

Discover the size of the problem -

Discover the size of the problem - the business case.

Lonely individuals that live alone have a 32% higher risk of dying due to physical and mental illness.

So...

How might we reduce loneliness in people living alone during lockdown?

How **big is the problem** and **who does it affect?** Make quick calculations!

"We want to protect the environment"

helping supermarkets reduce their

"We want to protect the environment by

waste"

helping **consumers** make smarter grocery store purchases"

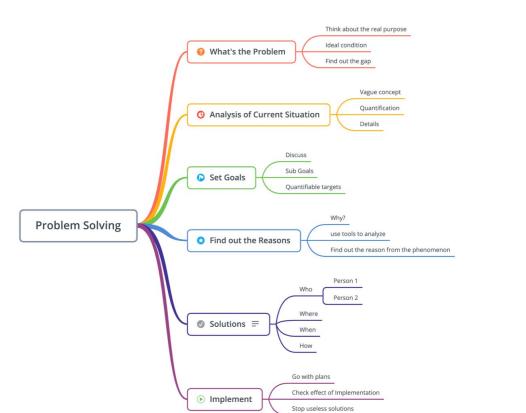
"We want to protect the environment by

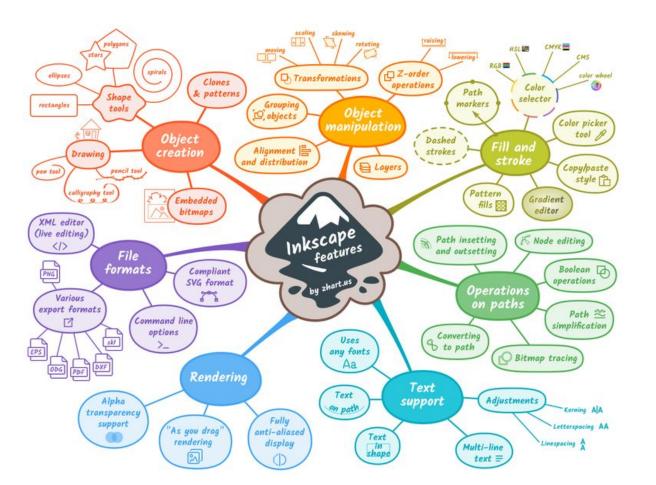
helping **local governments** visualise factory pollution"

"We want to protect the environment by

Don't look at solutions yet!

Create a mindmap.





and **political**.

Think social, environmental, economic

Exercise 2a

We will create a sample mind map together.

your mind maps

You should be doing

SMR while you build

Exercise 2b

In your own teams, create a mindmap for one brief of your choosing.

20 minutes

Future visioning

What do you think an **ideal future** should look like?

How can you **get there**?

Exercise 3

In your own teams, describe how an ideal future in your chosen brief would look like.

Think in terms of WHAT IF... and HOW CAN WE?

20 minutes

Homework

For next week, develop your mind maps and decide on three challenges to focus on.

Complete 'Early Thoughts', 'Mind Maps' and 'Challenge Discovery' tabs in playbook.

Don't forget to think about the people it affects.