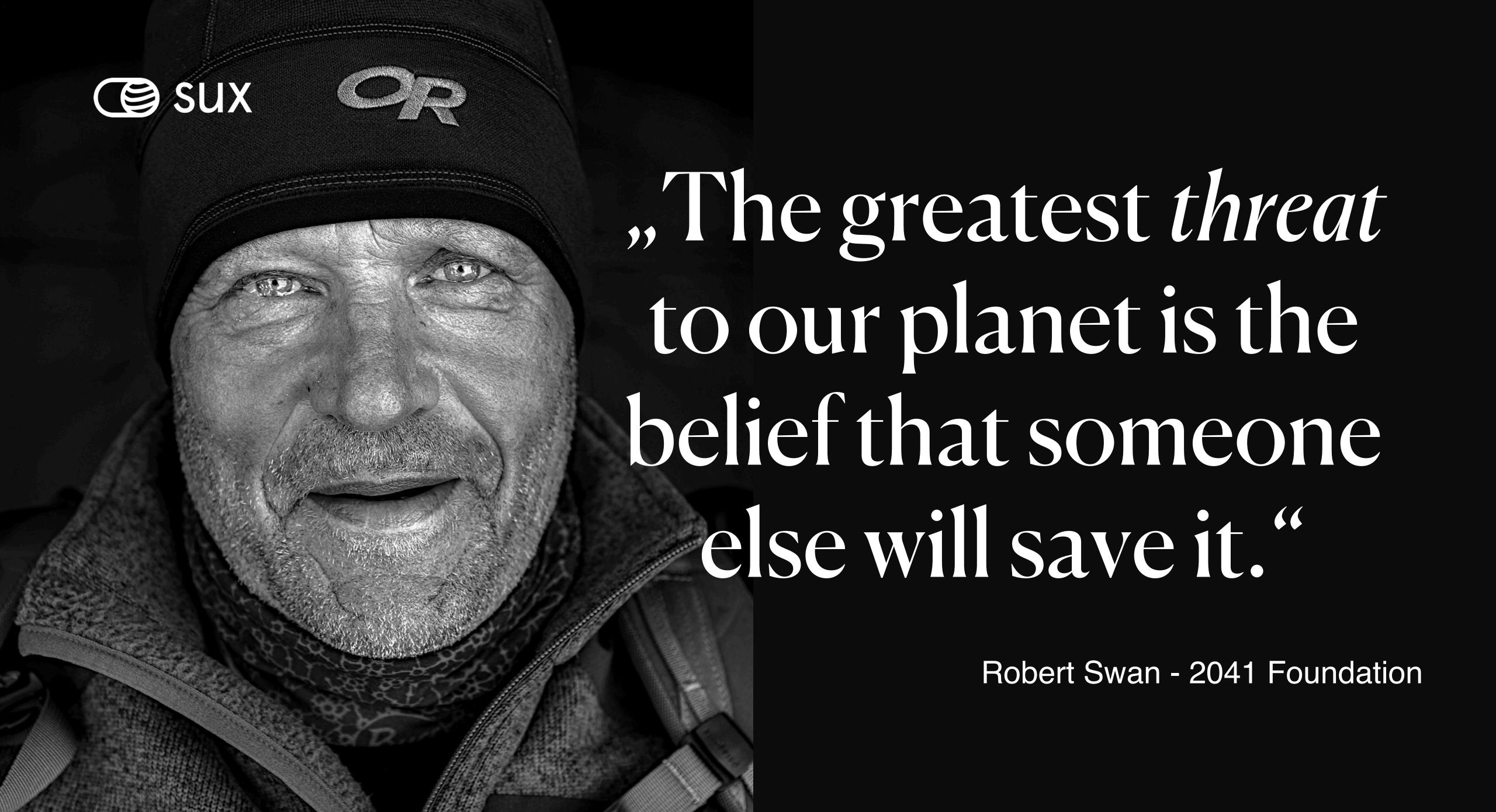
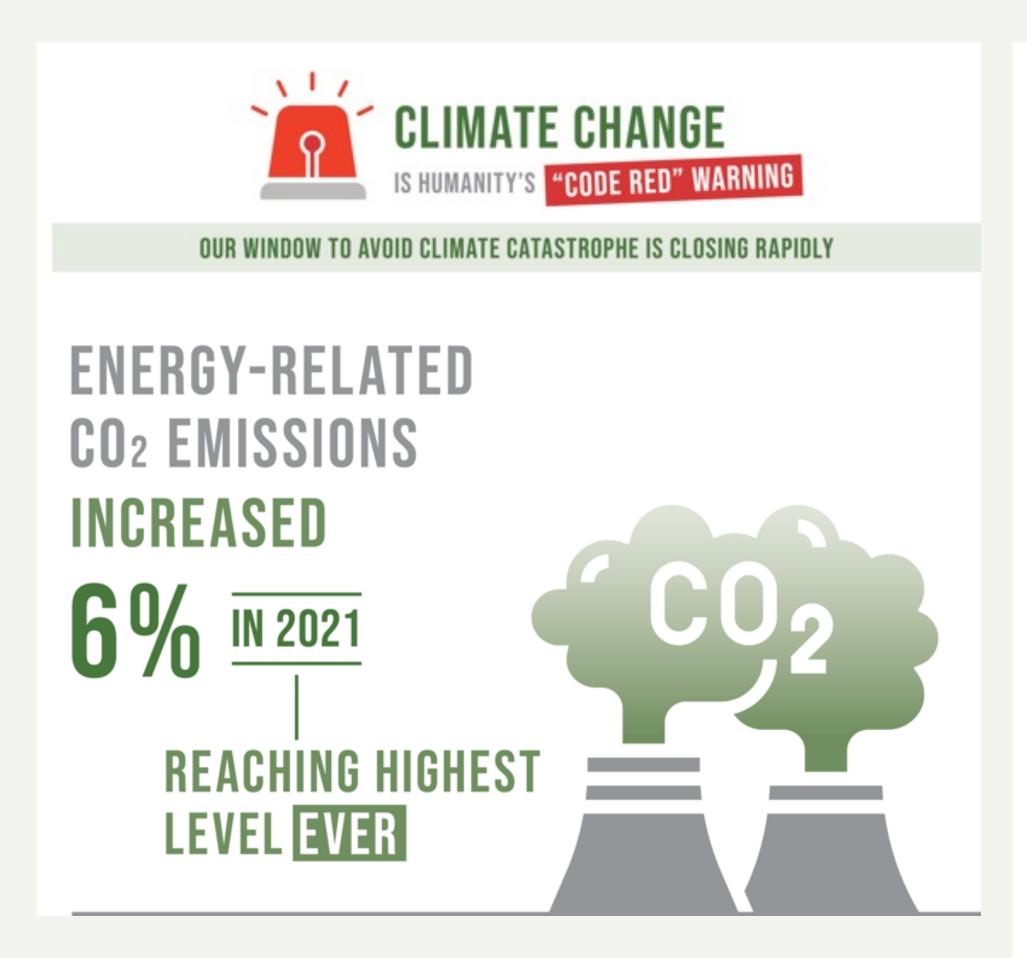


# Sustainable User Experience

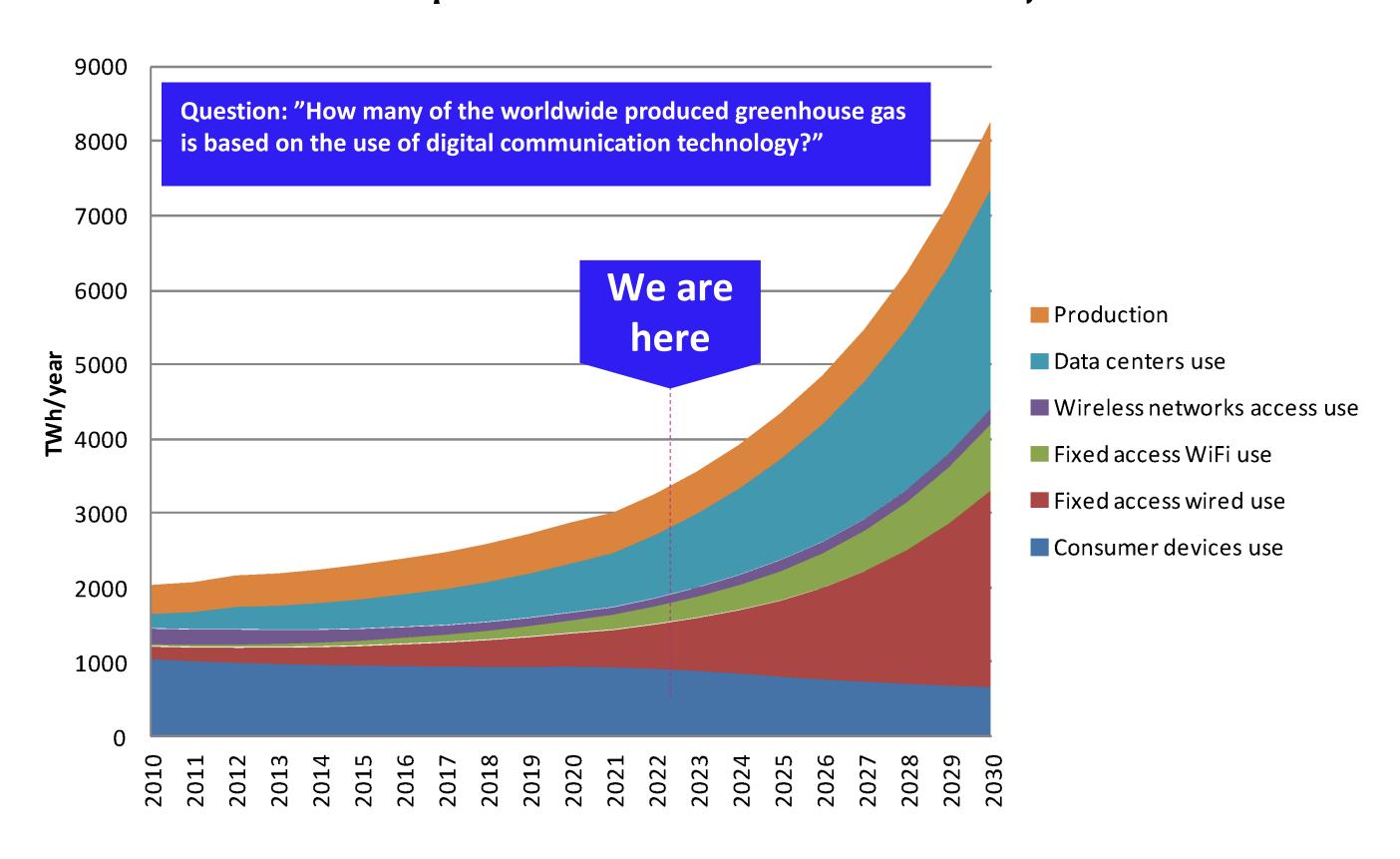


## Global Electricity Usage of Communication Technology: Currently and Trends to 2030



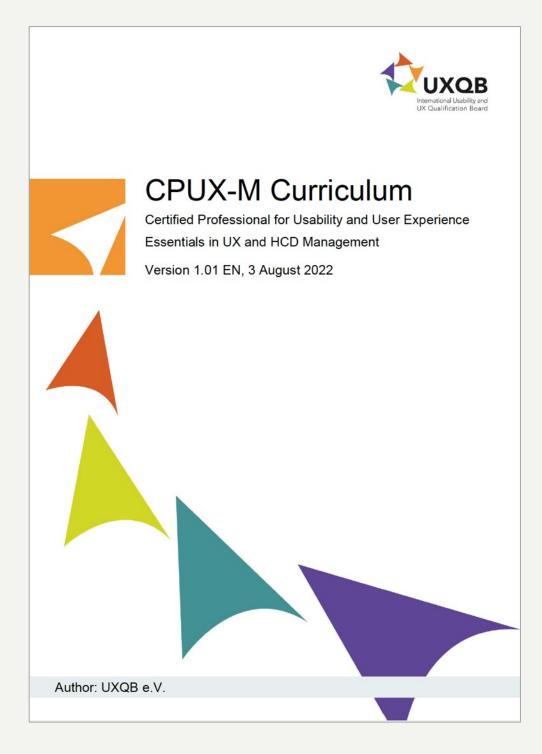
Source: https://sdgs.un.org/goals/goal13

## Expected case scenario CT electricity



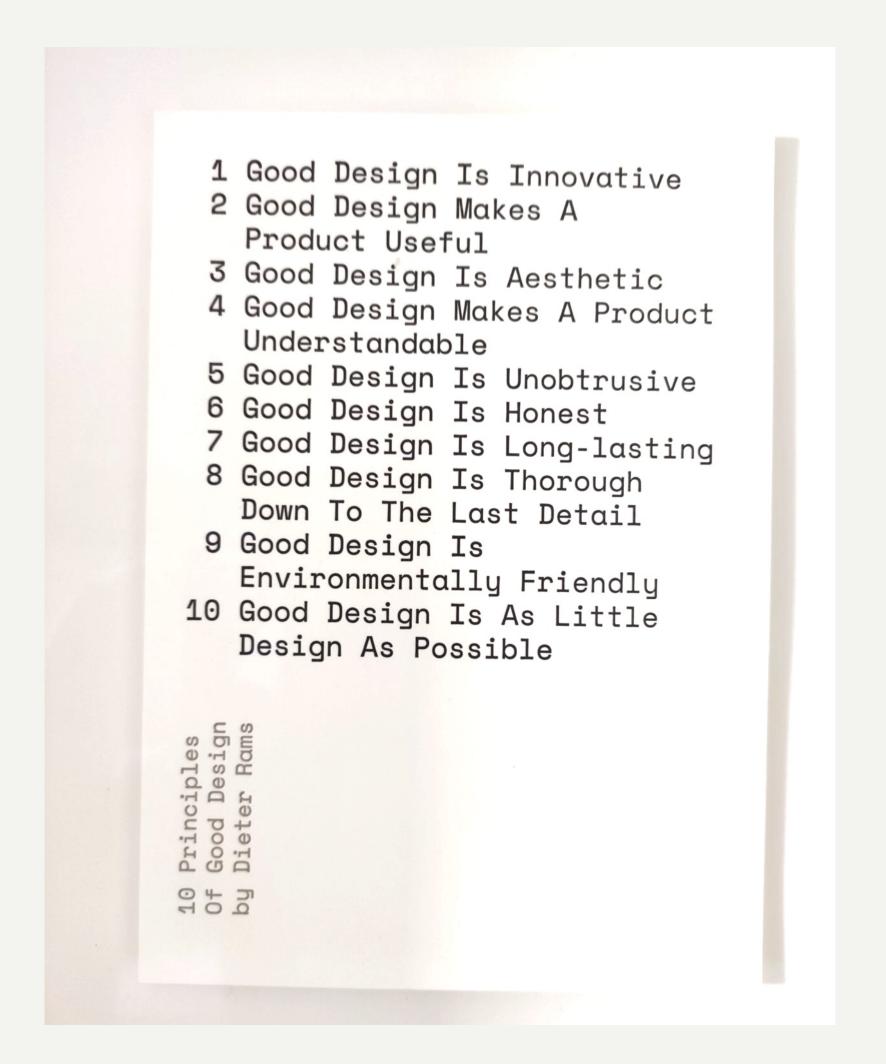
Source: On Global Electricity Usage of Communication Technology: Trends to 2030, https://www.mdpi.com/2078-1547/6/1/117

Sustainable design puts people and planet first by delivering interactive systems that aim to use the smallest amount of energy possible.

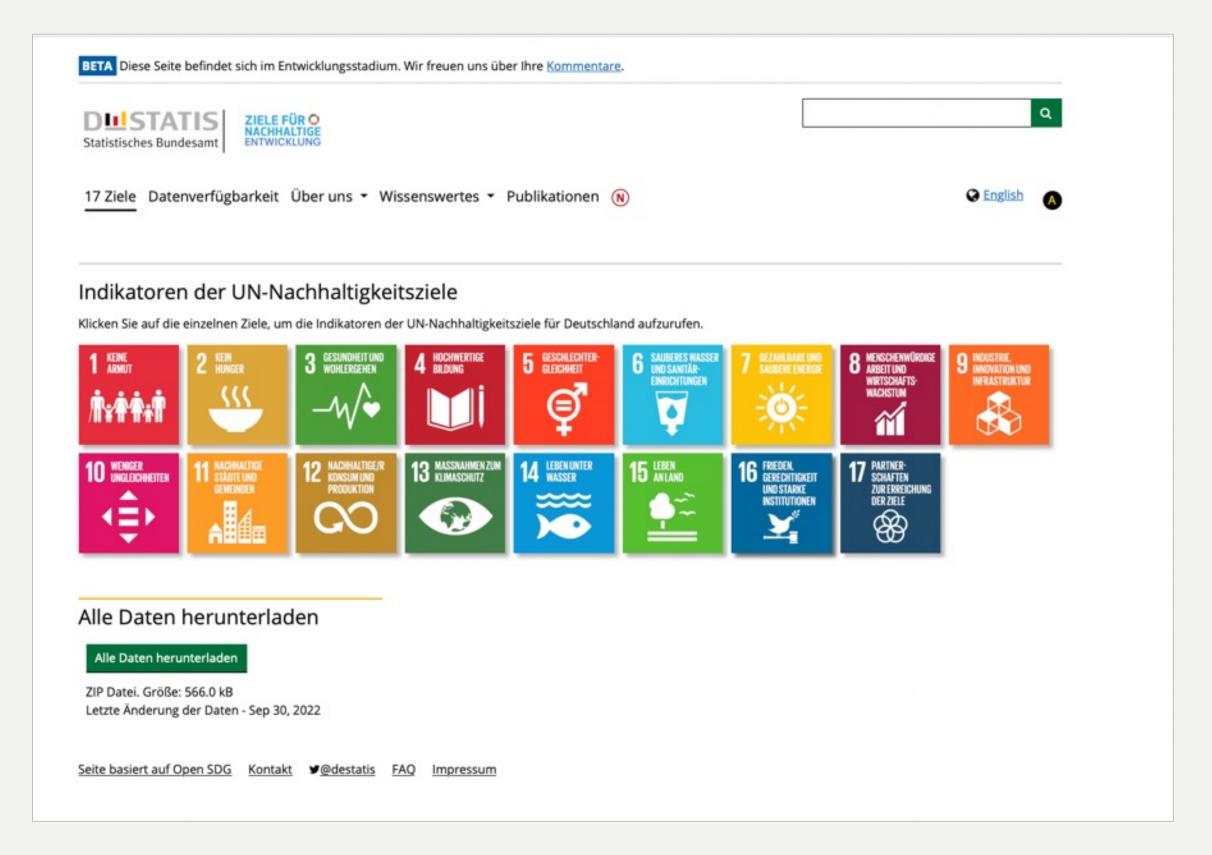


Source: https://uxqb.org/en/certification/essentials/

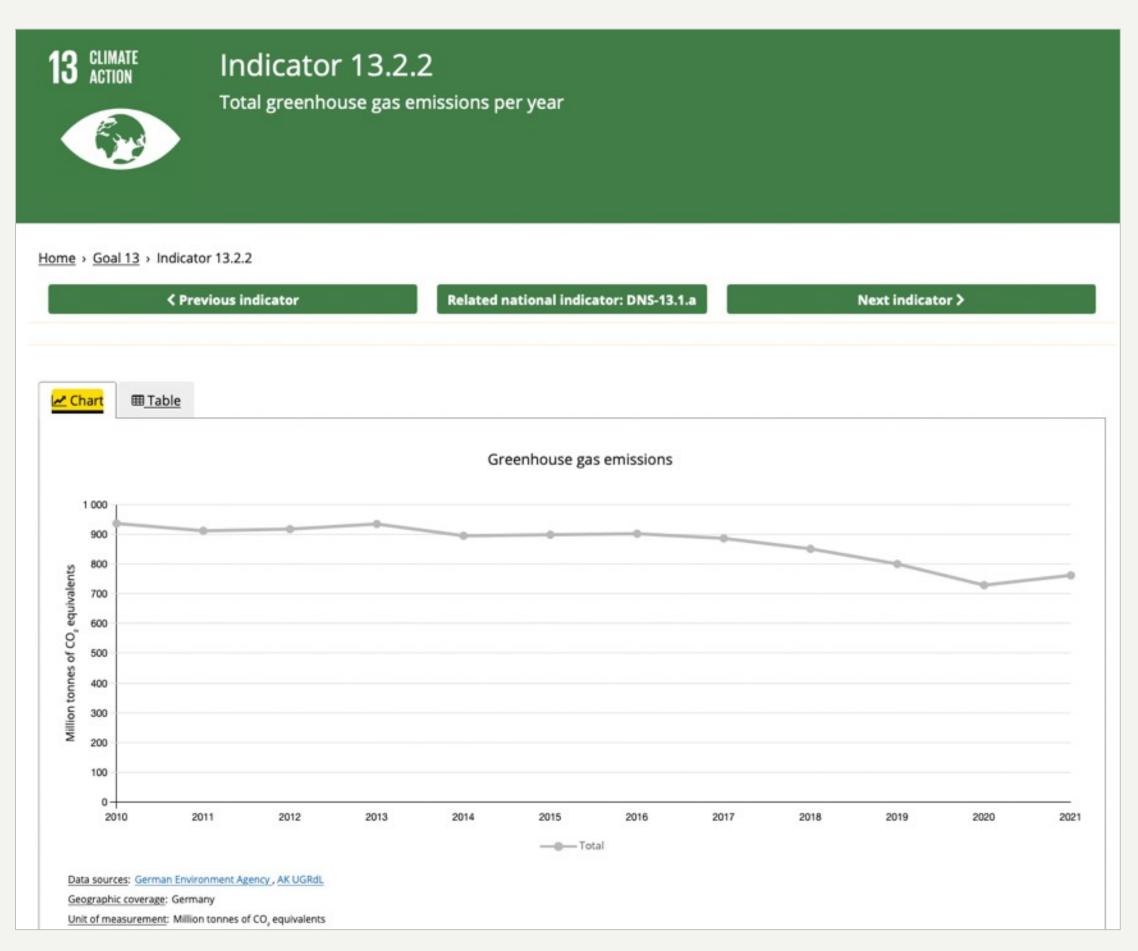
- Sustainable design:
  An approach to designing that prioritises people and planet by minimising the resources required for the use of interactive systems.
- The cumulative impact of the world's websites is such that if the Internet was a country, it would have been the sixth largest polluter in 2021.



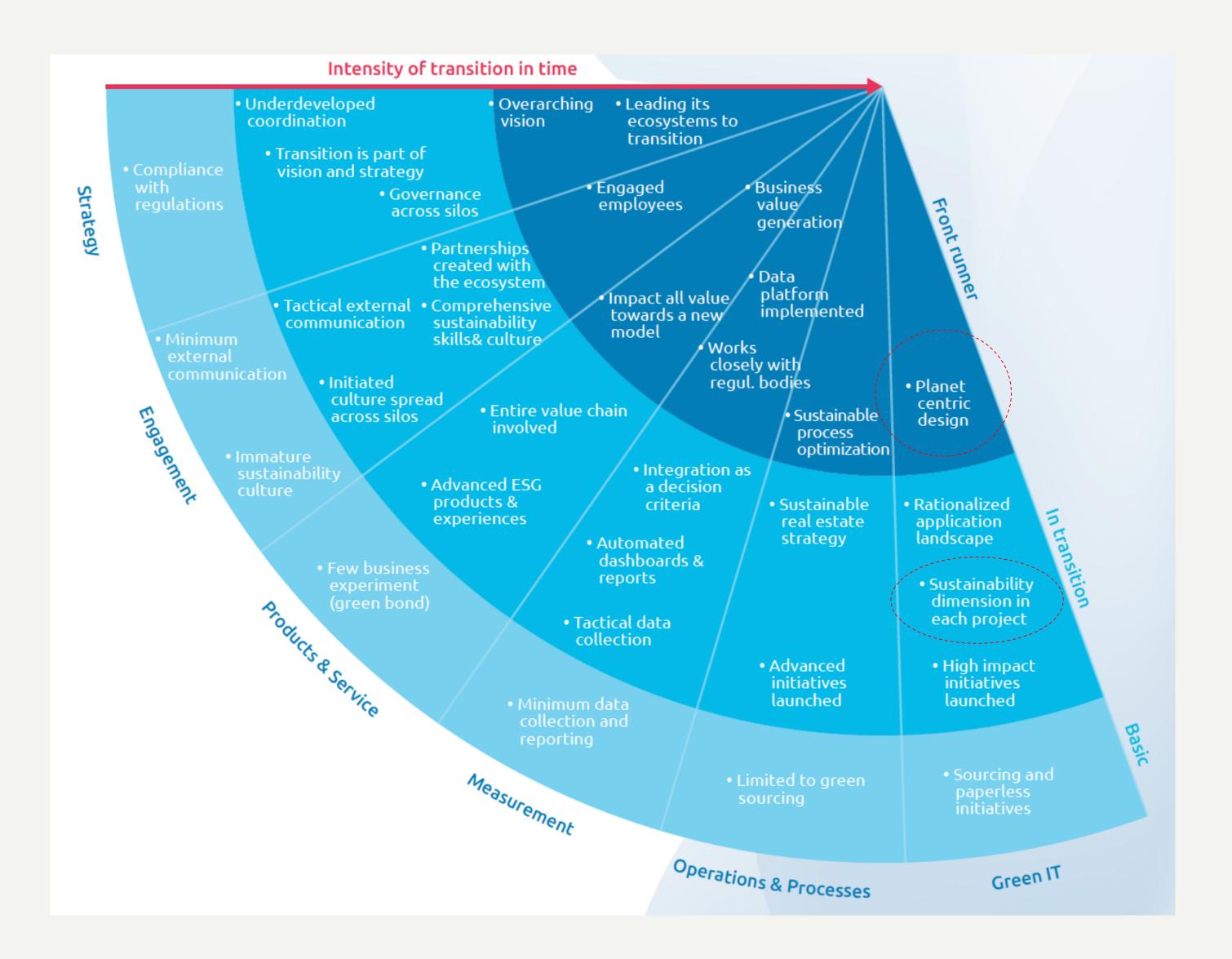
## Statistisches Bundesamt - Indicators of the UN Sustainable Development Goals

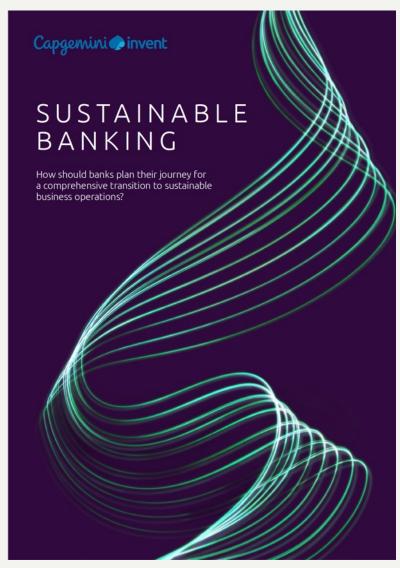


Source: https://sdg-indikatoren.de/en/



## The Capgemini Invent Transition Map



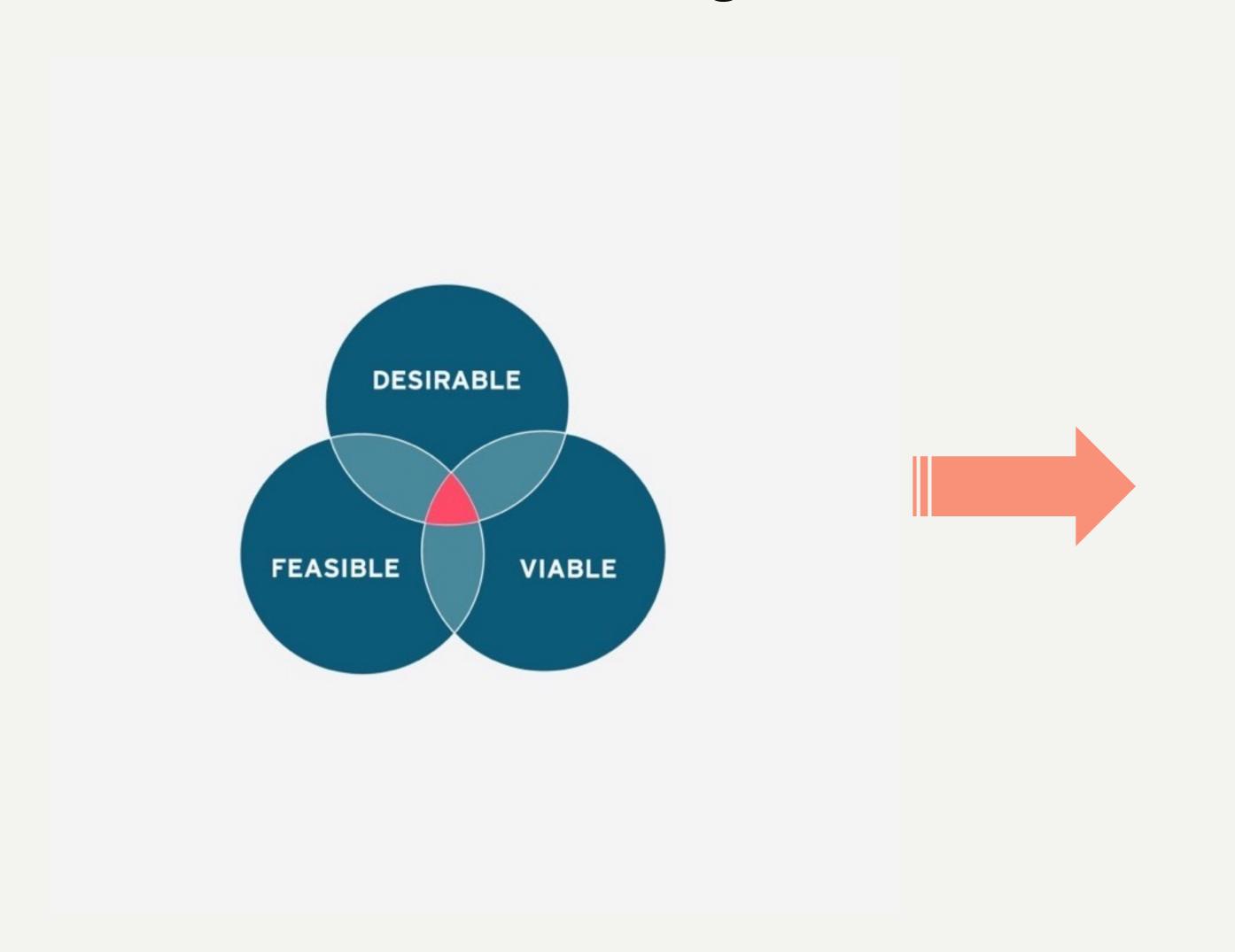


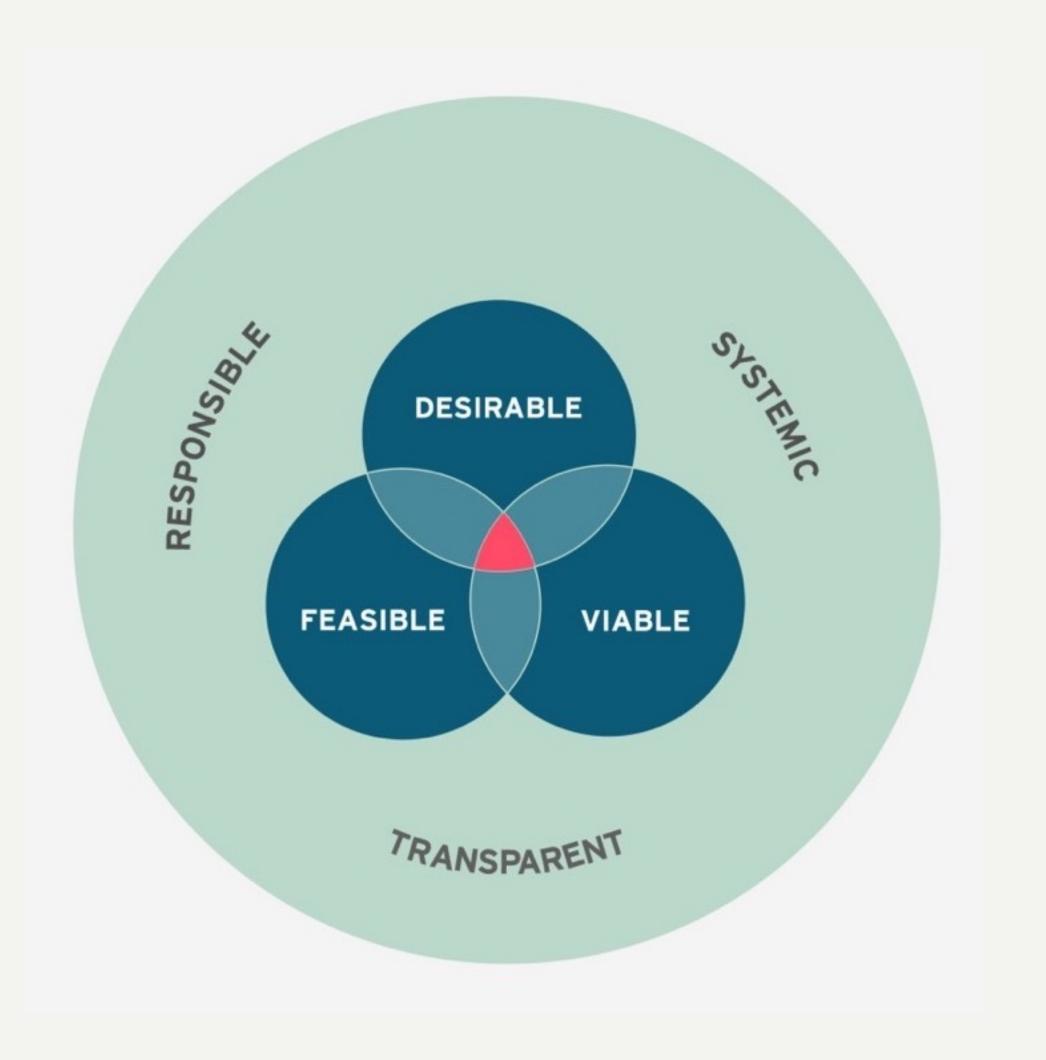
## "THE GREATEST THREAT TO OUR PLANET IS THE BELIEF THAT SOMEONE ELSE WILL SAVE IT."

**Robert Charles Swan** 

## Human-Centered Design

## Planet Centric Design





## What is SUX?

- SUX was founded 2021 by a group of designers with the idea to develop a playbook to drive sustainability in UX and through UX, based on the SDG of the UN and non-profit.
- It grew to a community +1.400 worldwide and +100 designers are currently using the SUX workshop kit to develop ideas.



dea Playbook

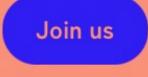
Join us

We are SUX

Follow us

## The Sustainable UX Playbook

Do you want to take part?



**↓** Explore SUX

## SUX in a Nutshell



The goal of SUX is to create a playbook and a community to drive and facilitate sustainability in and through our work.



The SUX Playbook is built by the community, for the community. Non-Profit.



And the SUX Playbook is built based on the UN sustainability development goals - to tackle all aspects of sustainability.

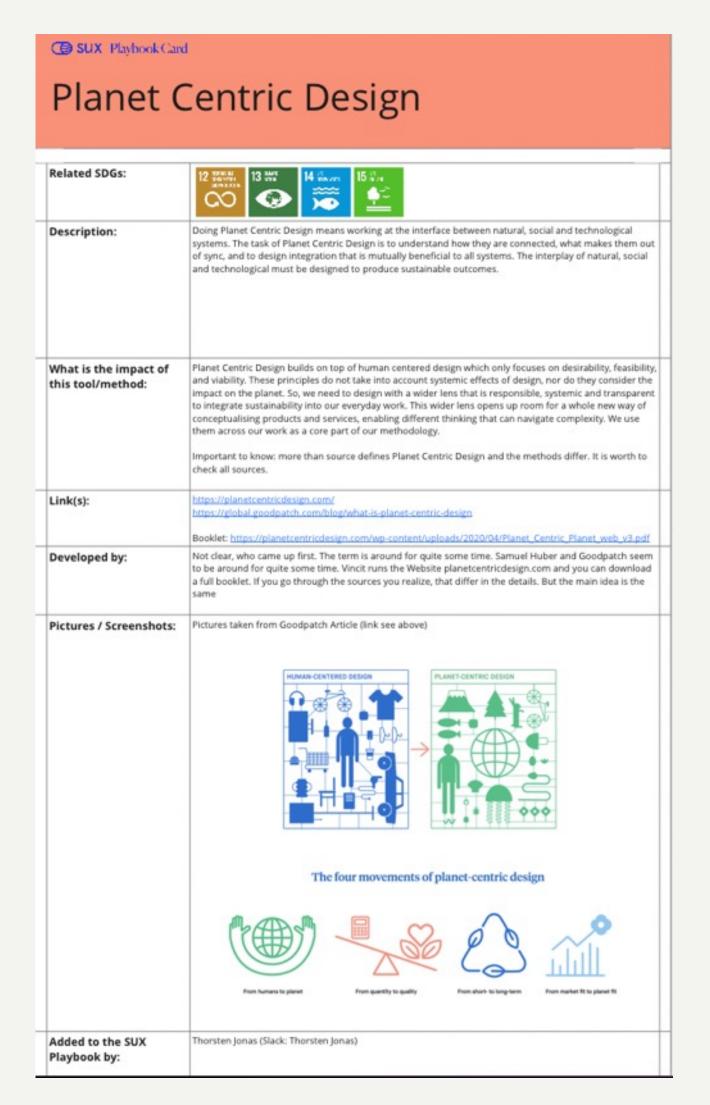
We need to move from a human to an humanity and environmental centered design approach

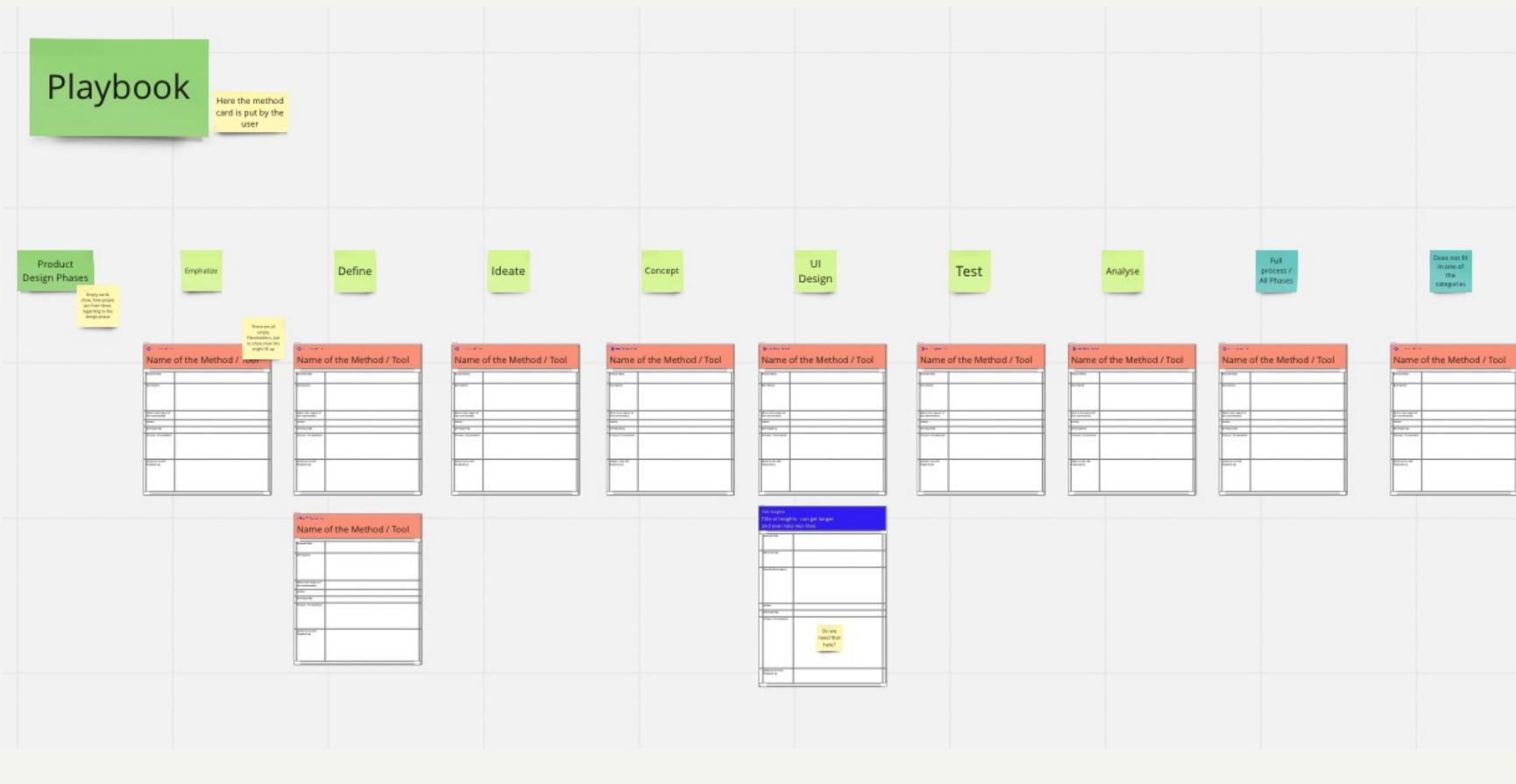
Thorsten Jonas SUX Founder

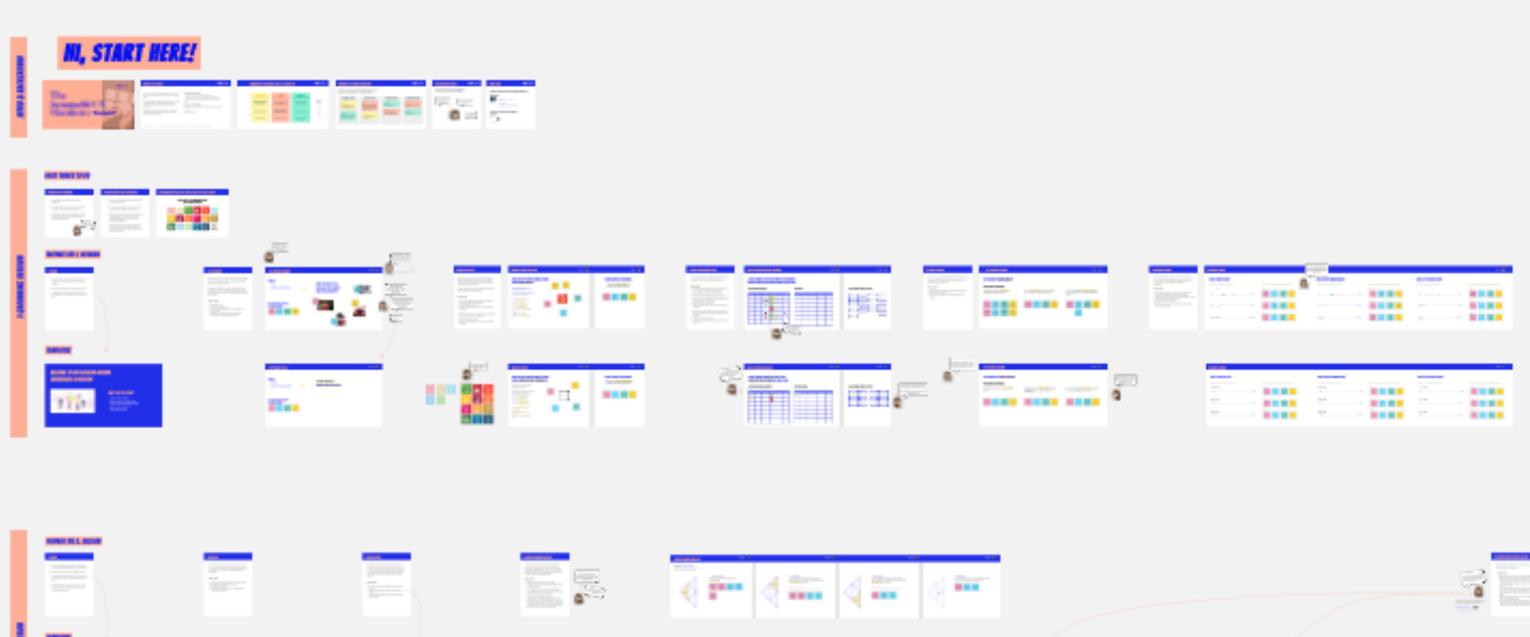
## SUX = concrete ideas to run Sustainable UX, for all aspects of UX Design Process



## Draft of Sustainable UX Playbook









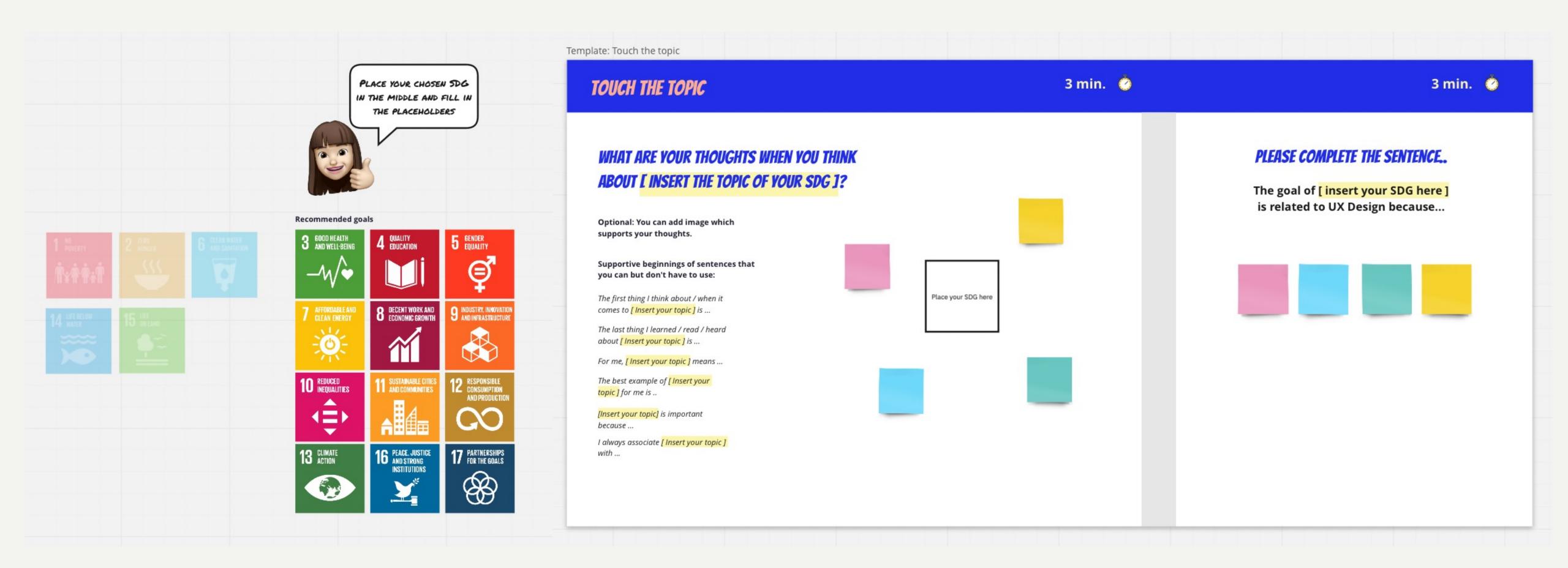


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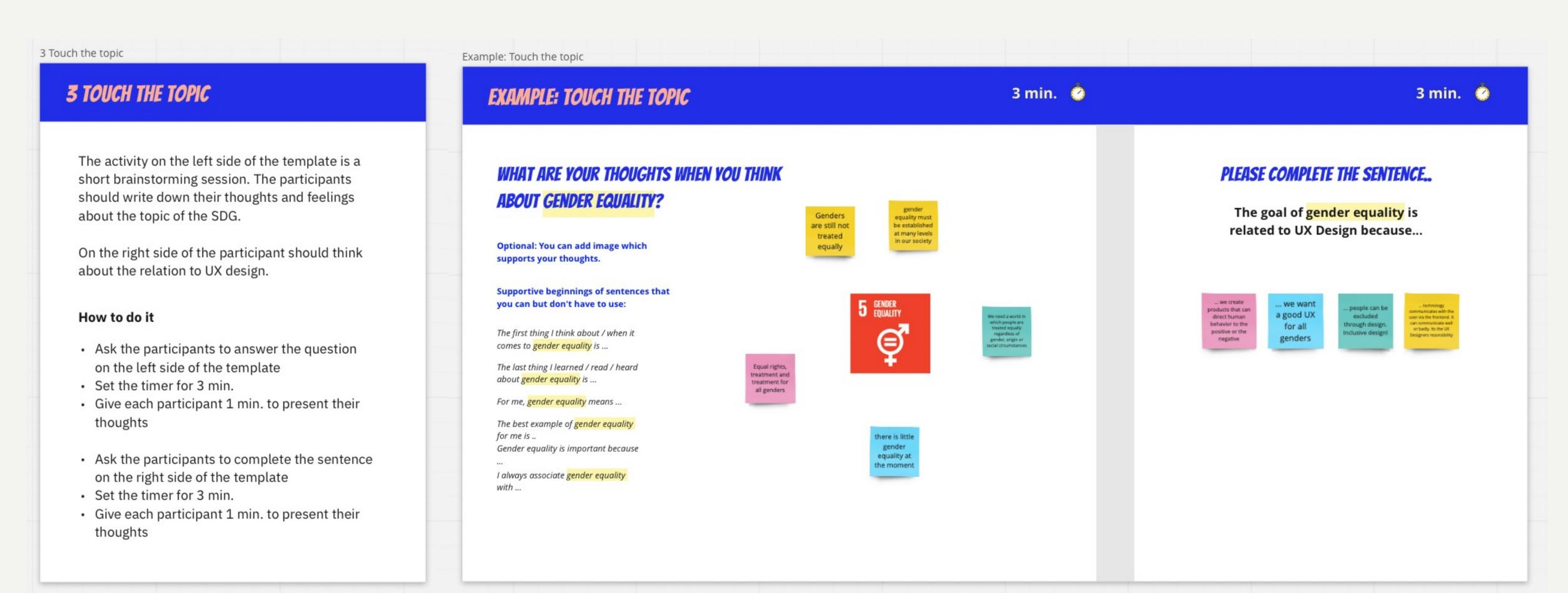
# SUX WORKSHOP TEMPLATE

- Grounding Session
- Analyse Session
- Creation Session
- Presentation Session
- Beispielhaft befüllte Templates für Design Thinking Prozess

## Extract from Sustainable UX Design Toolkit Grounding Session, Template "Touch the topic"



## Extract from Sustainable UX Design Toolkit Grounding Session, Template "Touch the topic"



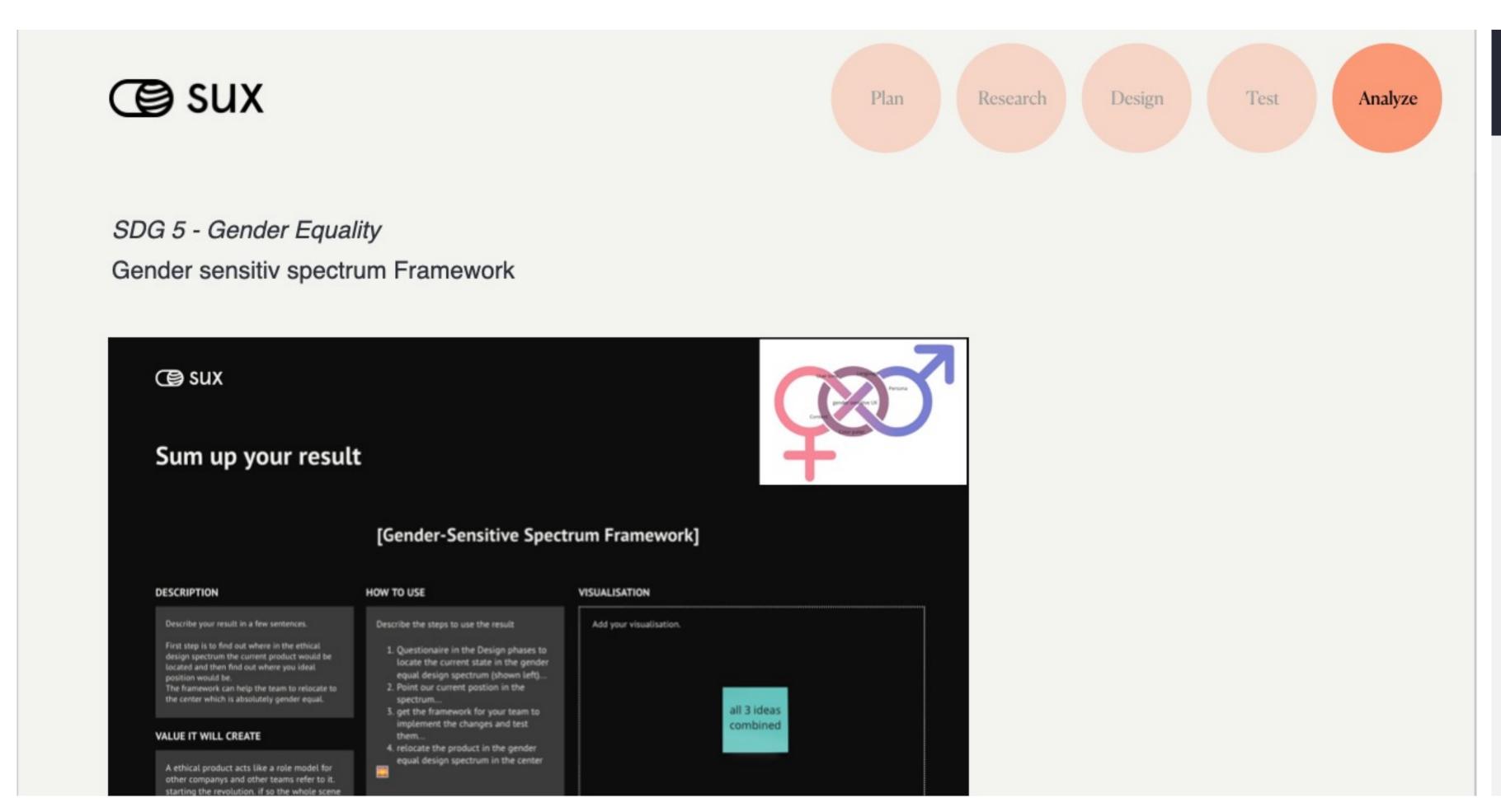
## Extract from Sustainable UX Design Toolkit Grounding Session, Template "Touch the topic"



3 min.



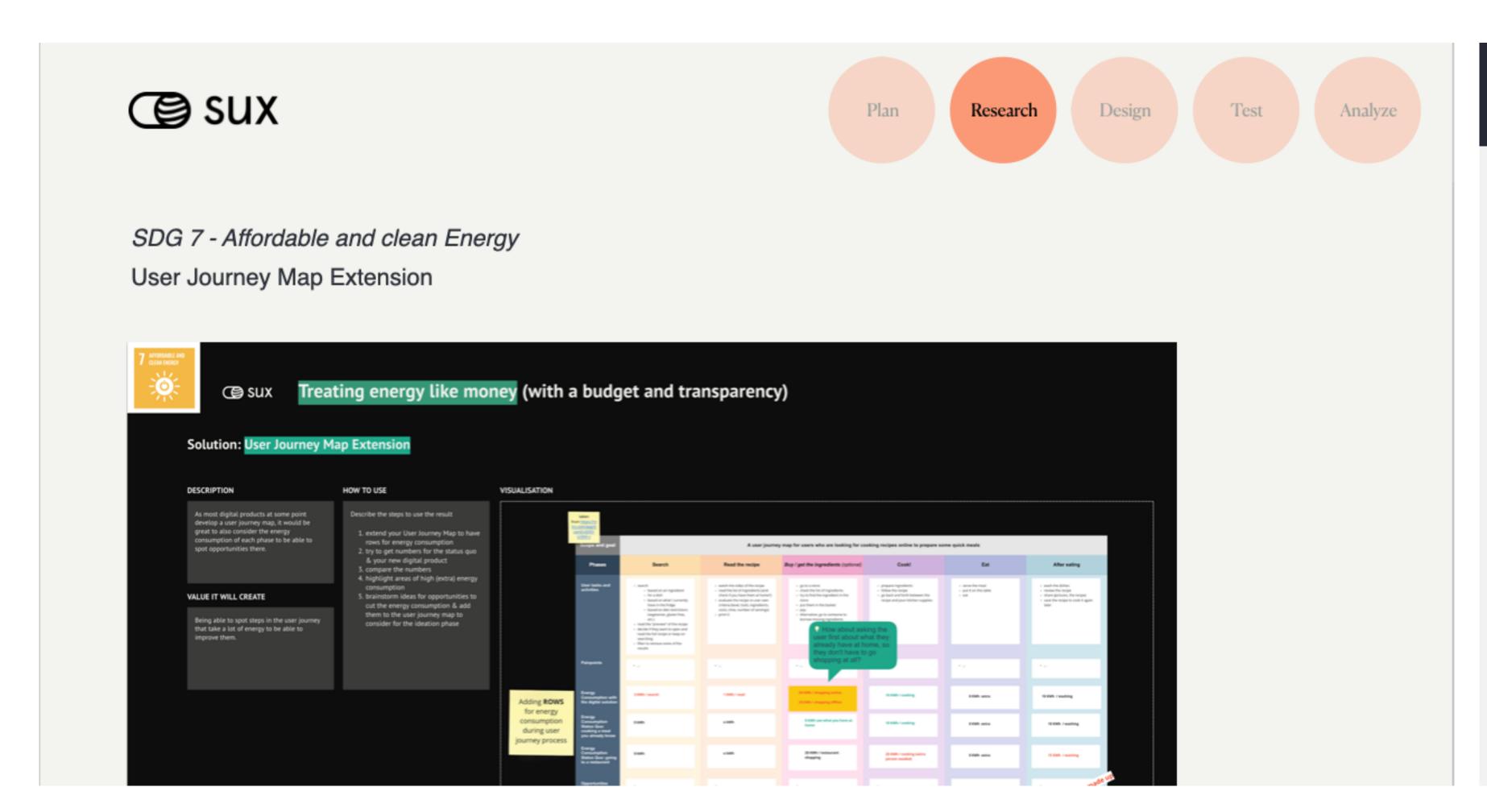
## Examples of outcome



## Gender Sensitive Spectrum Framework

- The idea of this framework is to create a way to determine the current state of a product in a gender equal design spectrum and
- with the result to try to move the product into the center of it.

## Examples of outcome



## Treating energy like money

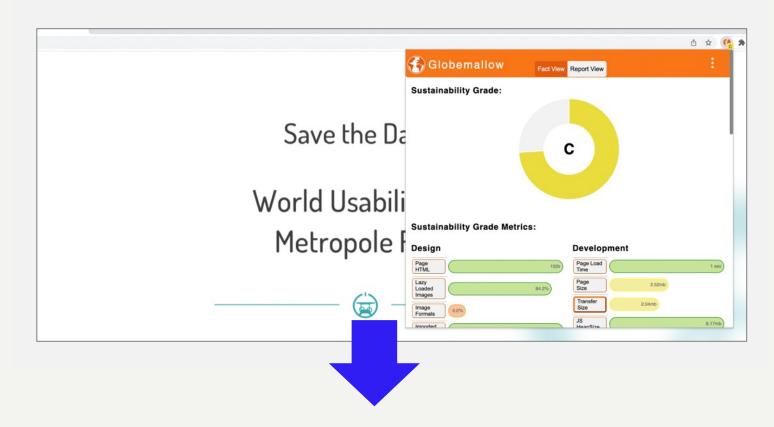
- Extension of user journey maps, so that the energy consumption of the digital product is visible in any phase of the user journey
- Identify opportunities for improvement (reduce energy consumption)

## Sustainable UX Assessment: diagnostics of applications to indicate energy-related CO2 emissions

Question: "What is our share on this and what can we do to reduce our greenhouse gas emissions based on IT?"

## **Browser Plugin Globemallow**

- Open Source Chrome Browser Plug in
- Measurement of kWh and CO2 Emissions for using webpage
- Rating of sustainability grade

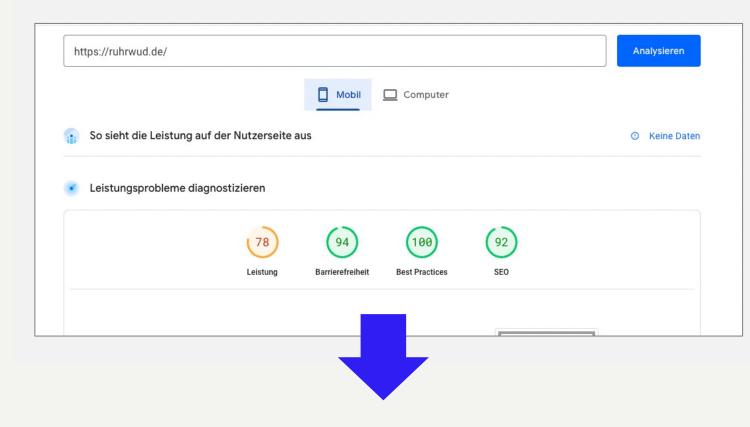


## **Outcome of audit:**

- Data of current energy and greenhouse gas emissions
- Data on Design & Development related features with room for improvement

## **Pagespeed Insights**

- Set of specific factors, measurement of overall user experience
- Most factors are measured in time spend = energy used to render webpage

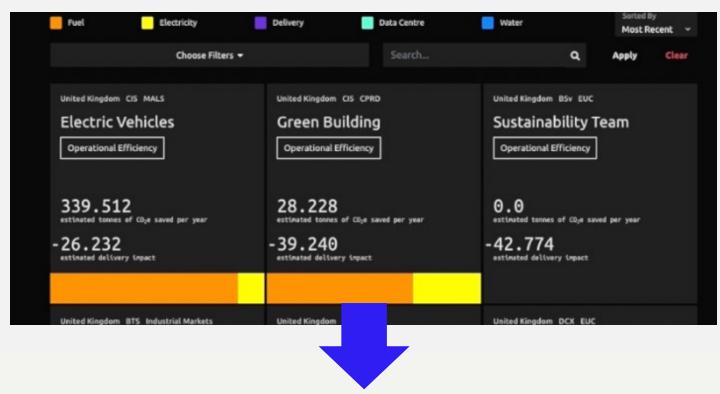


## **Outcome of audit:**

 Detailed recommendations to reduce time spend to render webpage = reduce energy used to render webpage

## **Carbon Calculator**

- Tool developed by Group Sustainability Team to calculate the carbon impact of team working on a project
- Enables to calculate the potential carbon savings of a project



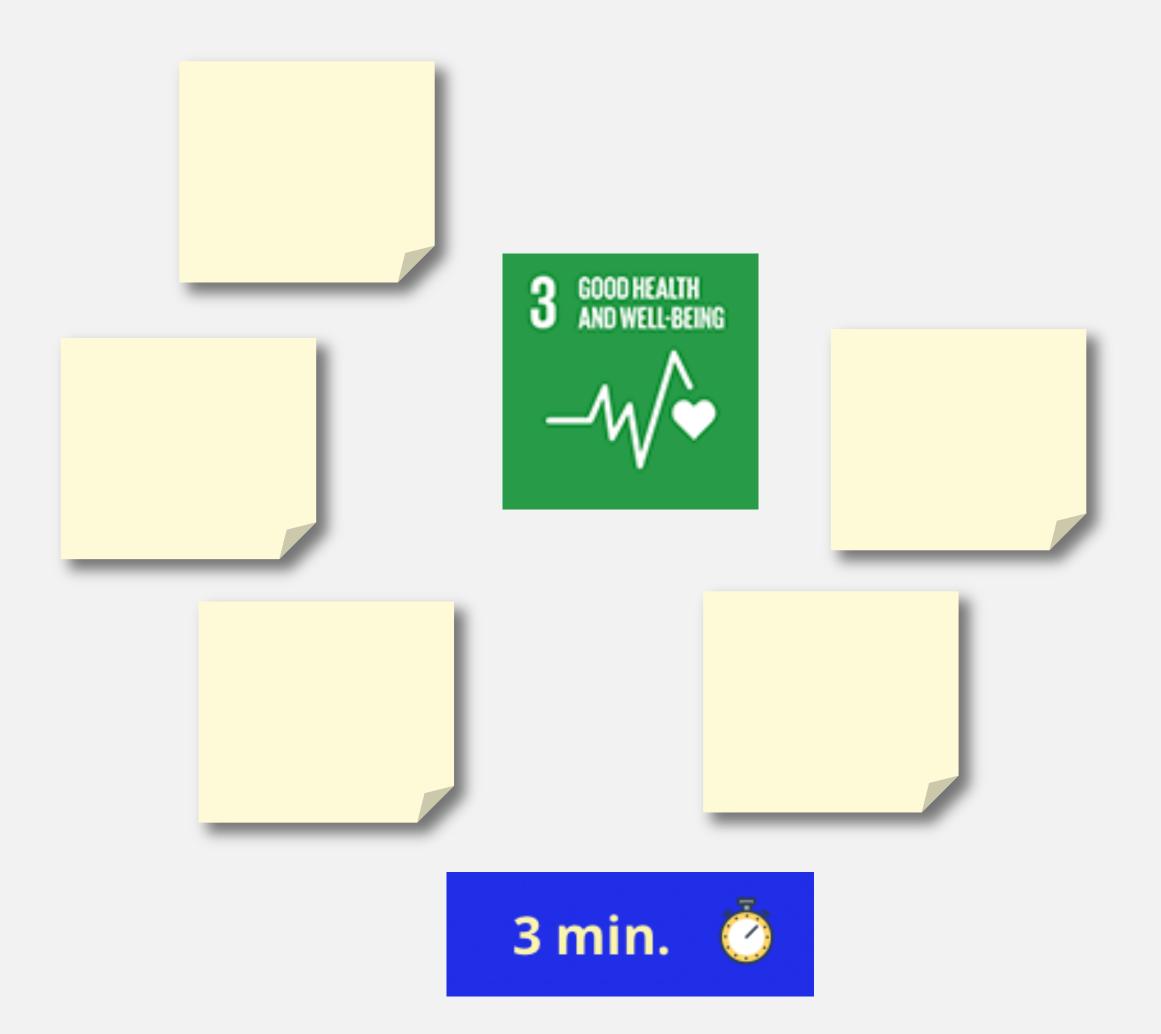
## **Outcome of audit:**

• Estimations of measures like electricity, fuel or water as baseline calculation to find potential for savings during and after the project

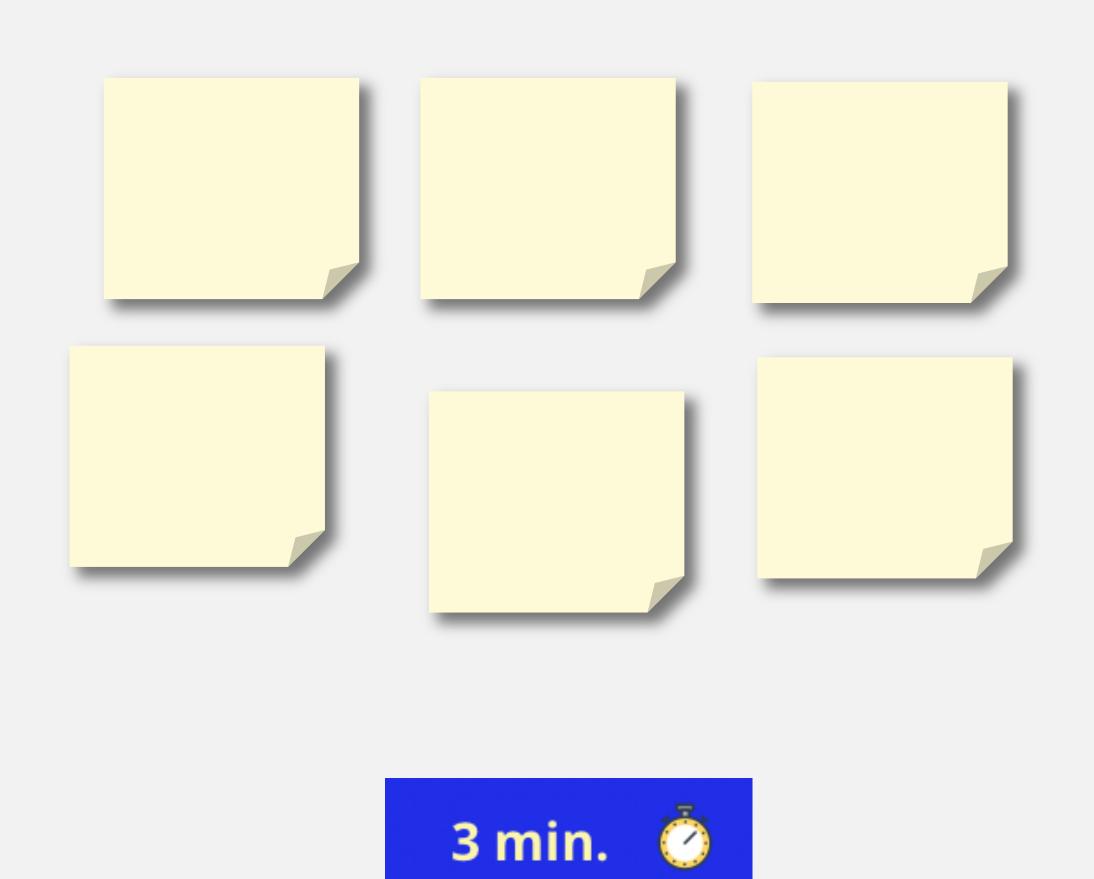
## Currently 21 SUX Teams are working on 9 SGDs, but not on SDG 3, good health and well being"



Touch the topic: What are your thoughts when you think about "good health and well being"?



Please complete the sentence: The goals of good health and well being are related to UX Design because ...



## Next step would be: Build a Knowledge-Base

## BUILD A KNOWLEDGE-BASE EXAMPLE

3 min. 🙋



3 min. 🕜



## COLLECT EXAMPLES OF DIGITAL PRODUCTS OR RESOURCES WHERE YOU CAN SEE THAT GENDER EQUALITY PLAYS A ROLE.

### DIGITAL PRODUCTS AND SERVICES

E.g websites, mobile/voice/ tv apps, IoT, Al, AR, VR, MR, other software, ...

CHTIGORY	MME / TITLE	PACTURE	POSITIVE /	MINT IS IT A POSITIVE/NEGATIVE EXAMPLE?	DATE / SOURCE / LIN
Social media	Facebooks Gender settings	North Color		Facebook included the option to chose different types of gender and the preferred pronoun	22.04.2021 facebook.de
Education	PinkProgramming -Leanin Circles			Pink Programming is a non-profit organization that organizes code events for the female, transgender, and non-binary communities.	22,04,2021 https://www.pink programming.co/
Education	Pronouns			Learn how to use right pronouns, a let of them I never heard before	22.04.2021
E-commerce Fashion	E.g Zalando	100 00 100 100 100 100 100 100 100		Online shaps are often divided between men and women, but some would like to buy clothing that is not stereetypical	22.04.2024
Game	Tell Me Why			One of the main character is Trans. really gender sensitive game	22.04.2024 
Travel	Airbnb	dirtorb		Airbath does not assign a gender identity to their users. They consider the gender of individuals to be what they identify and/or designate on their user profiles, and they expect the Airbath community to do the same.	29.04.2024

### **PUBLICATIONS**

E.g Books, articles, research,...

INDE	ANTHON	MNAT IT IS ABOUT?	WHY DO YOU RECOMMEND IT?	MRERE CAN I FIND IT? LINK, DO
tuined by Design	by Mike Monterio	Shows how design can have a negative impact	"They are not edge cases. They are human beings, and we over them our best work." good examples how not to design	22.04.2021 facebook.de

## COLLECT IMPORTANT TERMS OF THIS TOPIC

Add the term, a short definition and the link of your source.



general, with no reference to wor

epresentation of women and men.

islated terres: gender fair language, gender neutral language

Linguage that is not gender and which considers people iender Aware pender roles and relationships and sin ability to understand the effects this

Sender Identity
Sender Identity is each perso
internal and individual eager pender. It is their sense of being a woman, a man, both, neither, or nywhere along the gender spectrum person's gender identity may be the ame as or different from their sex at

Transgender
Describes a person whose gas
identity and assigned sec at b sentities outside of male and female

ctions or thoughts that are profile Epreconceived ideas of what worn and roles should be based on their

titudes and actions that discrimiainst people based solely on their

as. Related terms: gender sensitive ual orientation is interpersor e are physically, emotionally and/or

mantically attracted to. ne sex (male or female) assigne hild at birth, most often based child's external anatomy. Also referre as birth sex, natal sex, biological se

ven's attributes, characteristics and Ters from a given society's norms fo s should be based on their gende

vneratically accepted gender-n The established gender binar codeties that defines the gen trisen as a manufactor. igular pronoun set according to man woman if she is born male. Persons

who do not fit the gender norms are

Nost people - including mo transgender people - are b: nale or female. But people

on't neatly fit into the categories of man or Woman, or male or Temale

For example, some people have a

man or a woman, or a gender that

different than either male or

with any gender. Some people's

erres: trans, transgender

lemale. Some people don't identify

often discriminated against and

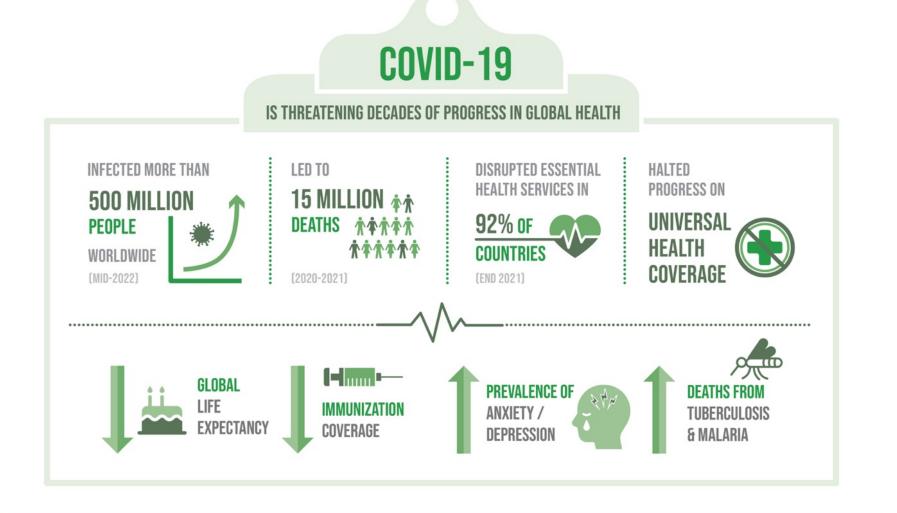
cosexual, and that heterosexual perior to all other sexualities.

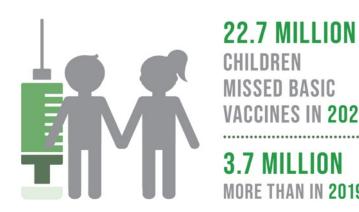
gender is the term used fe use gender identity match sen at birth. For example, a persenm female. This term is used as an posite to transgender.

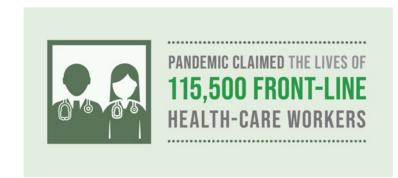
Trans wamani transgender wemanimale-to-female (MTF) mility is female may use these ten a describe themselves. Some will just



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

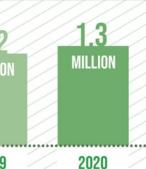








RISE FOR THE FIRST TIME SINCE 2005



2019

THE SUSTAINABLE DEVELOPMENT GOALS REPORT 2022: UNSTATS.UN.ORG/SDGS/REPORT/2022/

### Target 3.1

By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

## Target 3.2

By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births

### Target 3.3

By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

### Target 3.4

By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

### Target 3.5

Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol

### Target 3.6

By 2020, halve the number of global deaths and injuries from road traffic accidents

## Target 3.7

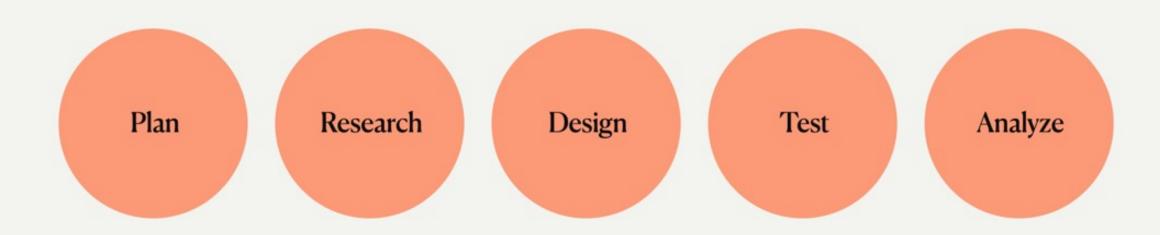
By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes

## Target 3.8

Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

## Target 3.9

By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination





## Ein gesundes Leben für alle Menschen jeden Alters gewährleisten und ihr Wohlergehen fördern

### Start → Ziel 3

✓ Vorheriges Ziel Nationale In	dikatoren zu Ziel 3 Nächstes Ziel >	
Unterziele	Indikatoren	
.1	3.1.1	Verfügba
Bis 2030 die weltweite Müttersterblichkeit auf unter 70 je 100 000 Lebendgeburten senken	Müttersterblichkeitsrate	
	Anteil der von qualifiziertem Gesundheitspersonal betreuten Geburten	Verfügba
3.2	3.2.1	Verfügba
Bis 2030 den vermeidbaren Todesfällen bei Neugeborenen und Kindern unter 5 Jahren ein Ende setzen, mit dem von allen Ländern zu verfolgenden Ziel, die	Sterblichkeitsrate von Kindern unter 5 Jahren	
Sterblichkeit bei Neugeborenen mindestens auf 12 je 1 000 Lebendgeburten und bei Kindern unter 5 Jahren mindestens auf 25 je 1 000 Lebendgeburten zu senken	3.2.2	Verfügba
bei Kindern ditter 5 Janier mindestens auf 25 je 1 000 Lebendgeburten zu senken	Neugeborenensterblichkeit	
3.3	3.3.1	Verfügba
Bis 2030 die Aids-, Tuberkulose- und Malariaepidemien und die vernachlässigten Tropenkrankheiten beseitigen und Hepatitis, durch Wasser übertragene Krankheiten und andere übertragbare Krankheiten bekämpfen	Anzahl der HIV-Neuinfektionen je 1 000 nicht infizierter Einwohner/ -inner Geschlecht, Alter und Risikogruppe	<u>n, nach</u>
	3.3.2	Verfügba
	Tuberkulose-Inzidenz je 100 000 Einwohner/ -innen	
	3.3.3	Verfügba
	Malaria-Inzidenz je 1 000 Einwohner/ -innen	

## Digitalisierung: Ein Gesundheitsrisiko?

NEWS 14.06.2018 Neue Studie



Haufe Online Redaktion



Eine neue Studie untersucht die gesundheitlichen Risiken der Digitalisierung.

Technologien in unterschiedlichen Arbeitswelten.

Die Digitalisierung betrifft rund 60 % der Beschäftigten in Deutschland sehr stark. Untersuchungen zu gesundheitlichen Risiken gibt es nur vereinzelt, die jetzt in einer Literaturstudie zusammengeführt wurden. Sie verdeutlicht, warum die Problematik weiter erforscht werden muss.

Wie hängen digitale Arbeitsformen, psychosoziale Arbeitsbelastungen und gesundheitliche Konsequenzen zusammen? Das war eine der Fragestellungen der Wissenschaftler der Universität Düsseldorf. Grundlage für ihre Studie waren 41 Beiträge zu den Auswirkungen von digitalen

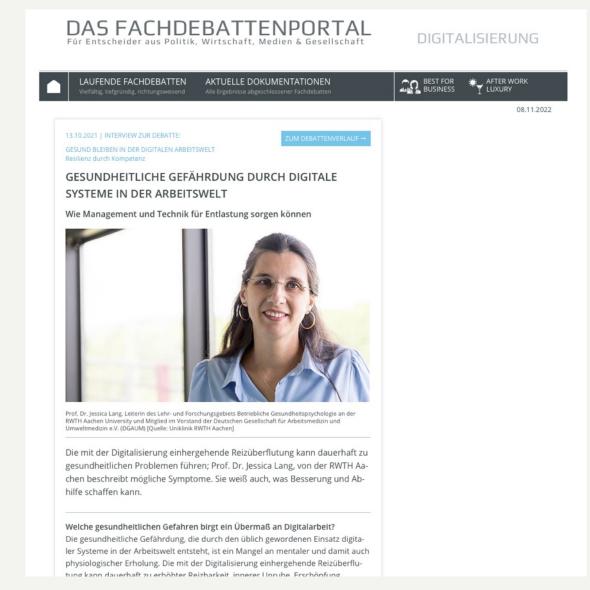
Digitalisierung in der Kommunikation am weitesten verbreitet

90 % der Befragten gaben an, digitale Geräte wie Computer, Tablet oder Smartphone für die Kommunikation zu nutzen. In der Industrie 4.0 kommen vor allem digitale Geräte zum Einsatz, die die Arbeit unterstützen (72 %) oder die mit spezieller Software die Arbeitsabläufe bestimmen (71 %).

30 % der Befragten arbeiten mit computergesteuerten Maschinen, so genannten Robotern, zusammen.

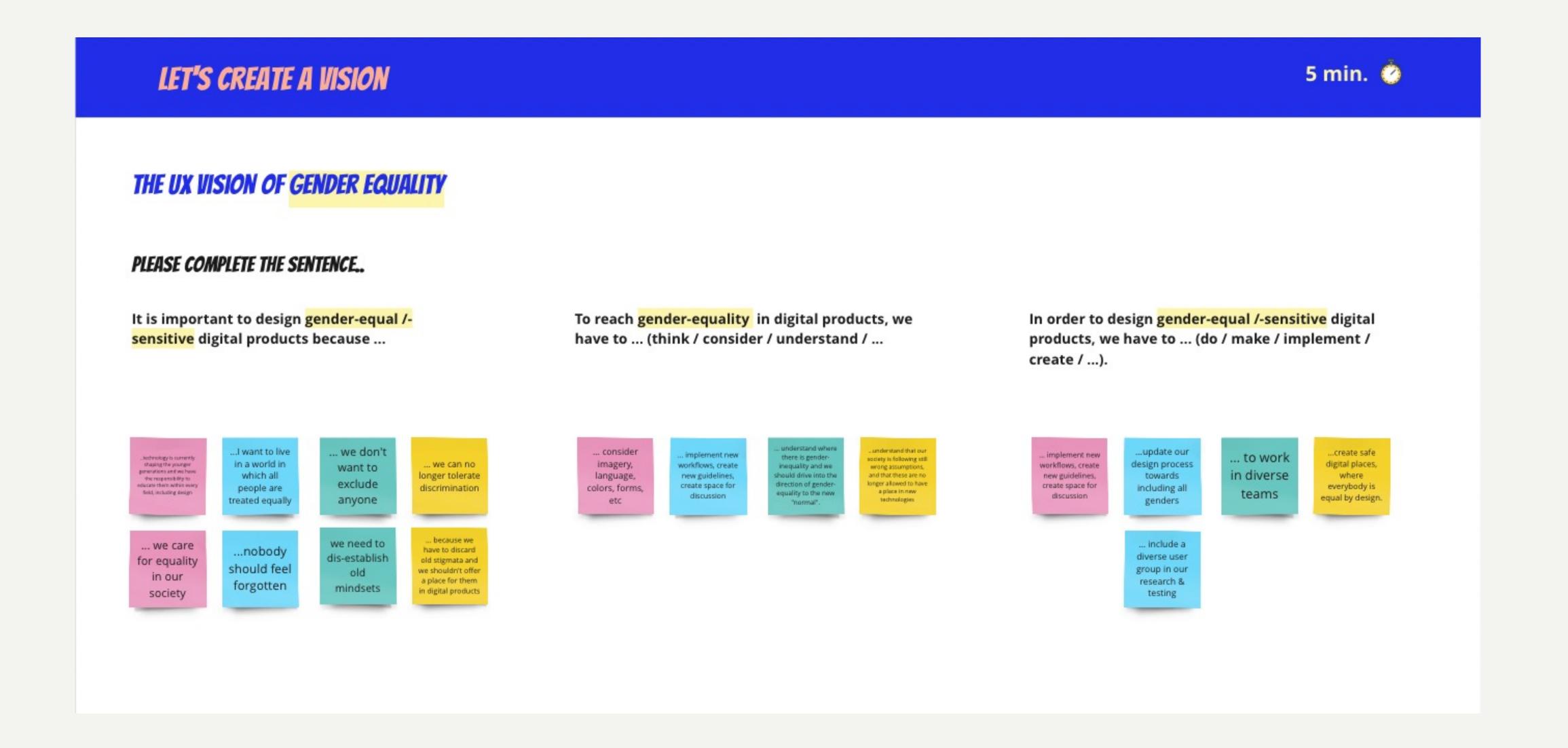


Bibliogr. Info (RIS) Offener Zugang

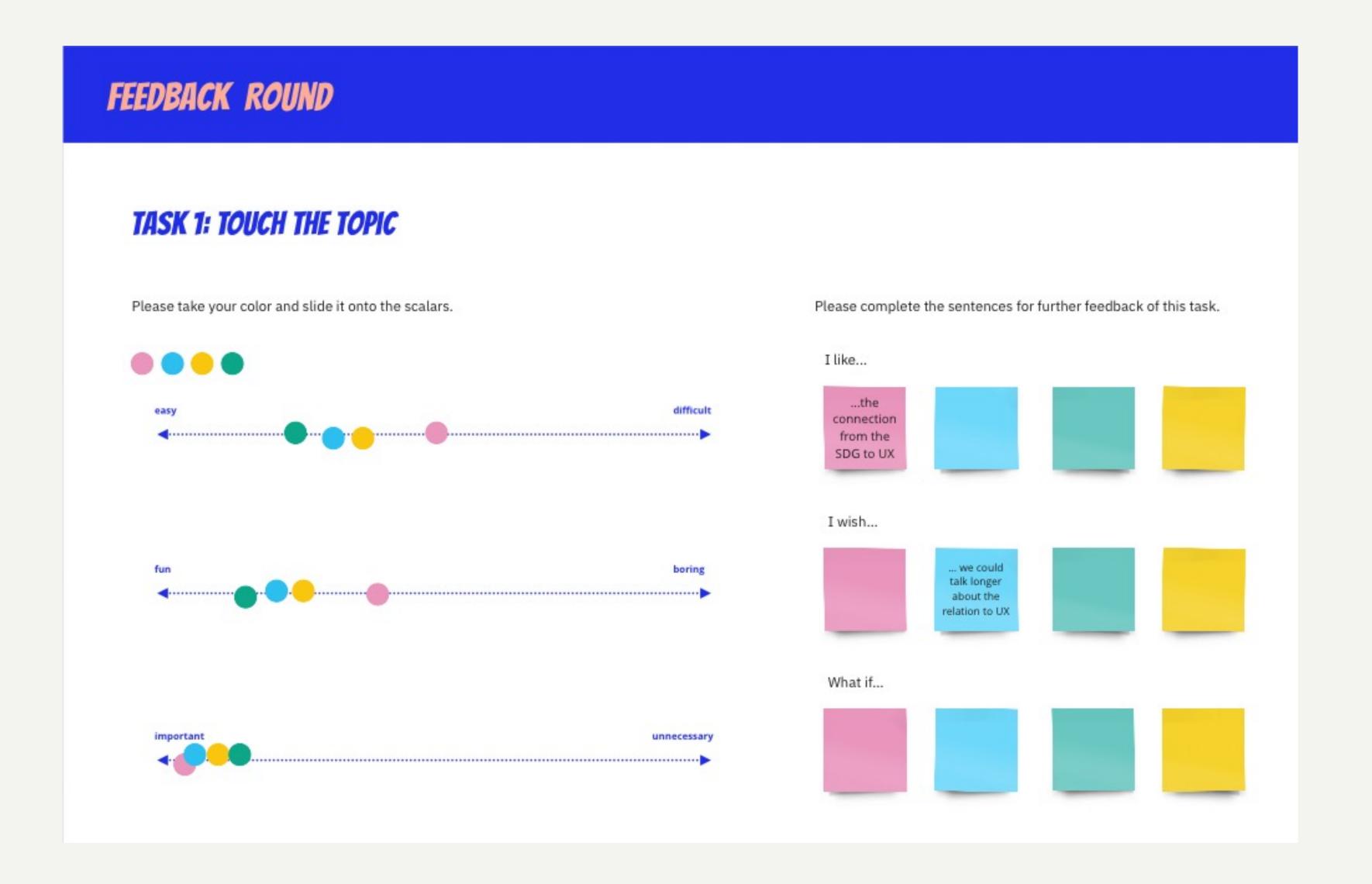


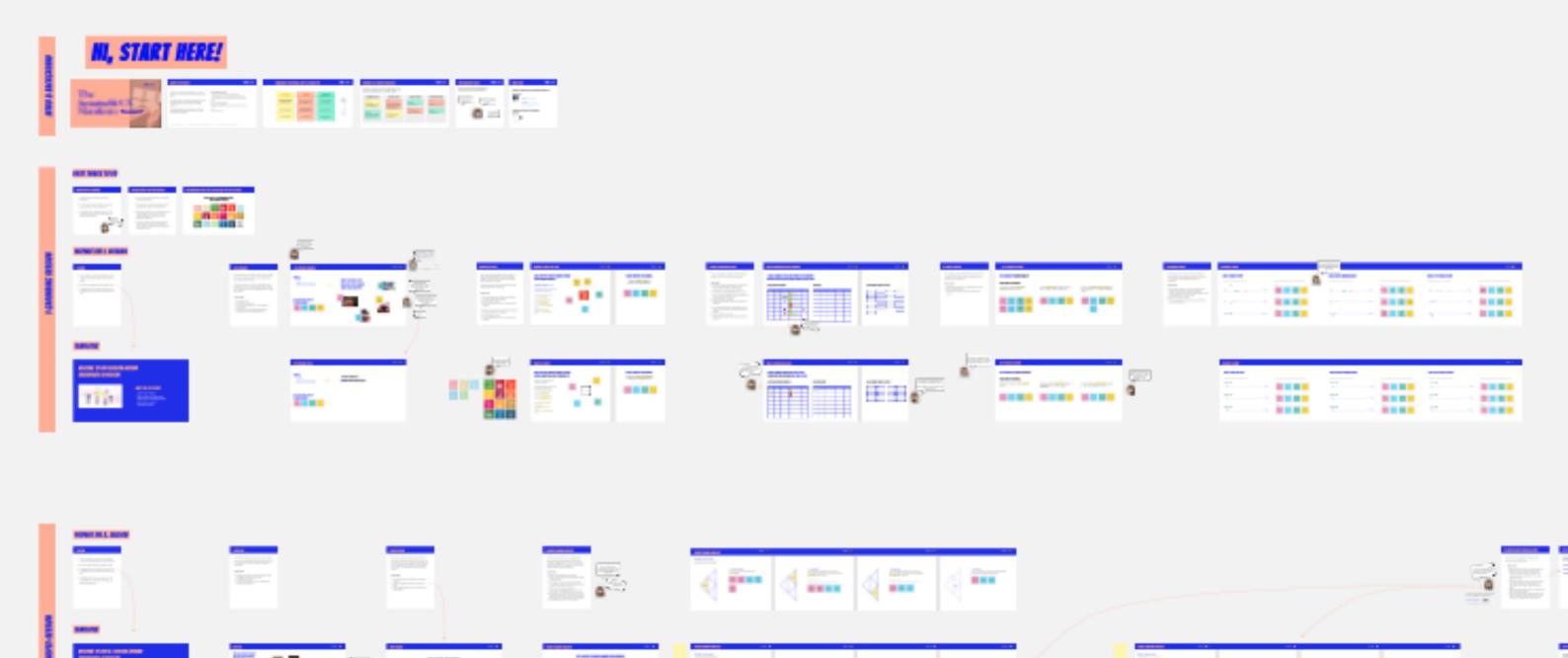


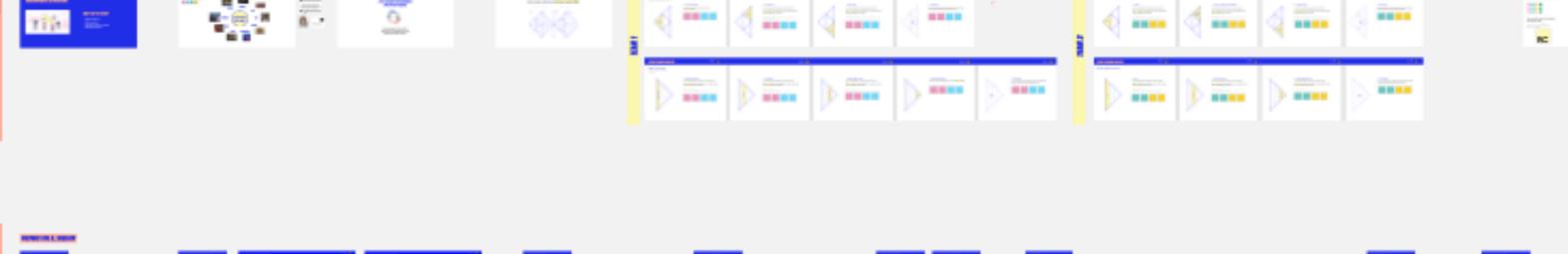
## Next step would be: Create a UX Vision for "good health and well being"



## Last step would be: Feedback round









# SUX WORKSHOP TEMPLATE

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We would love to welcome you to join our way and the SUX community!

## Thank you.

Web: <u>sustainableuxplaybook.com</u>

Web: Linkedin.com/sux

Insta: @SustainableUX

Twitter: @sustainbyUX



Slack: bit.ly/JoinSUXslack