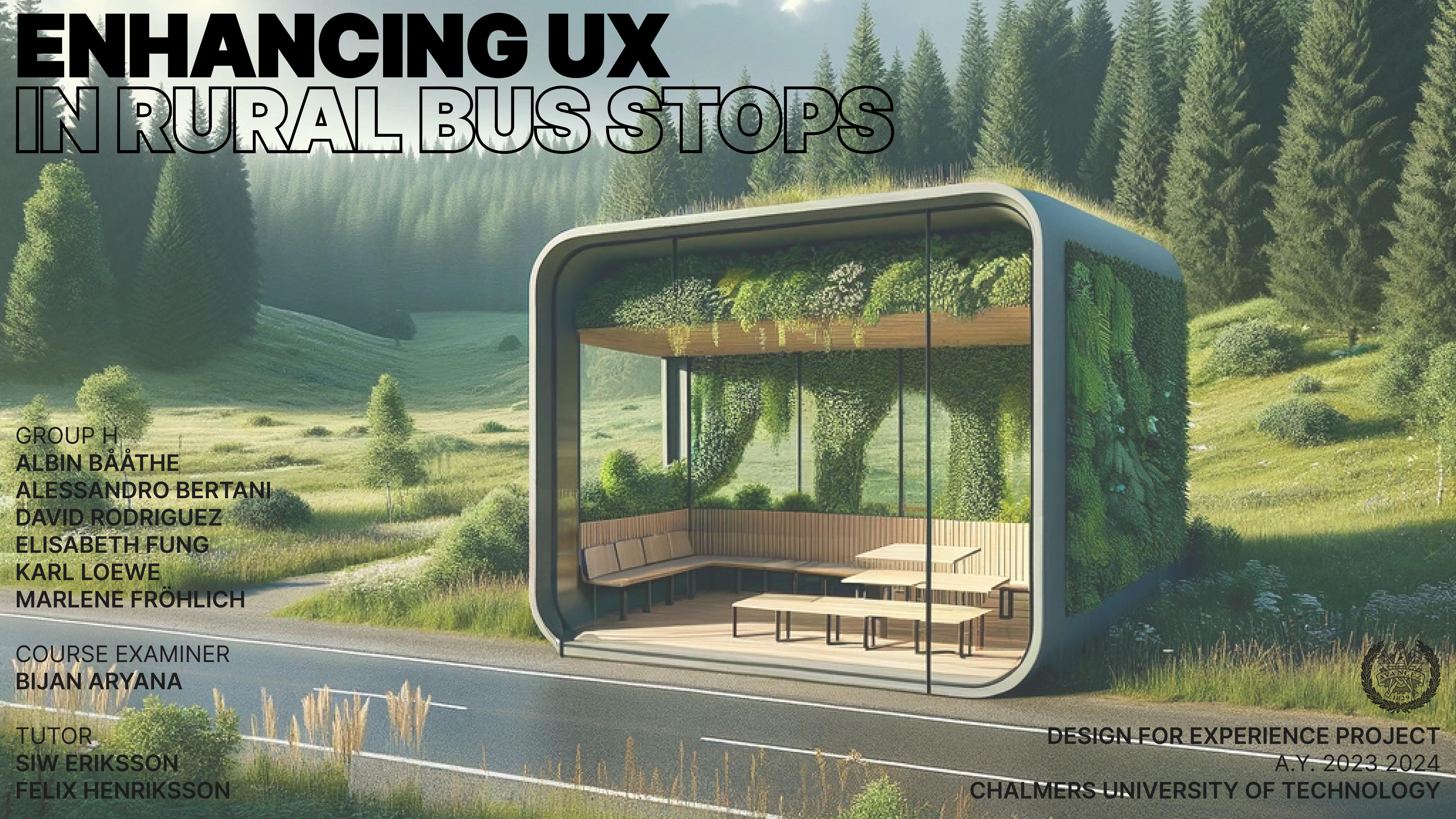


ENHANCING UX IN RURAL BUS STOPS



GROUP H
ALBIN BÅÅTHE
ALESSANDRO BERTANI
DAVID RODRIGUEZ
ELISABETH FUNG
KARL LOEWE
MARLENE FRÖHLICH

COURSE EXAMINER
BIJAN ARYANA

TUTOR
SIW ERIKSSON
FELIX HENRIKSSON

DESIGN FOR EXPERIENCE PROJECT
A.Y. 2023 2024
CHALMERS UNIVERSITY OF TECHNOLOGY



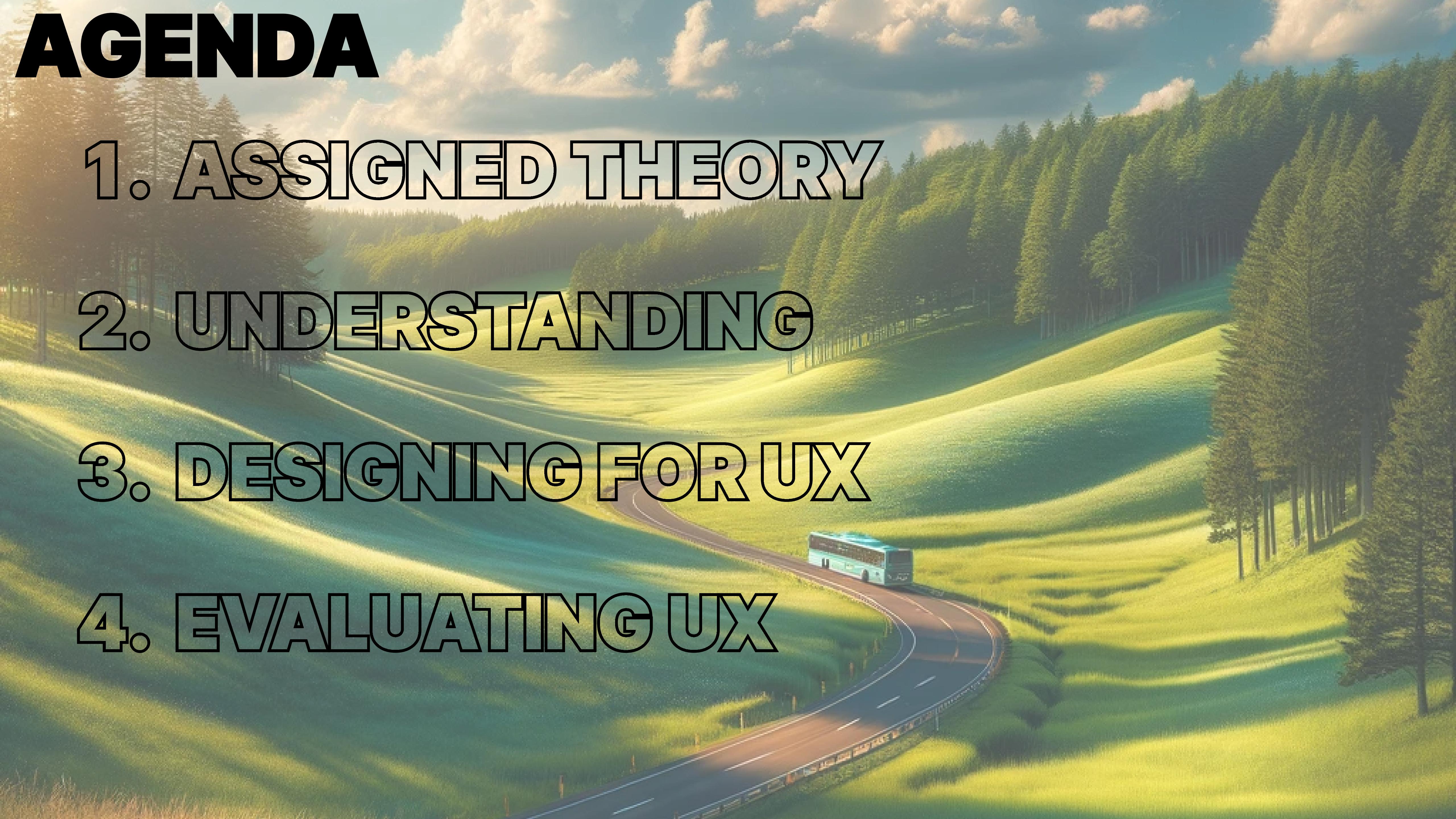
AGENDA

1. ASSIGNED THEORY

2. UNDERSTANDING

3. DESIGNING FOR UX

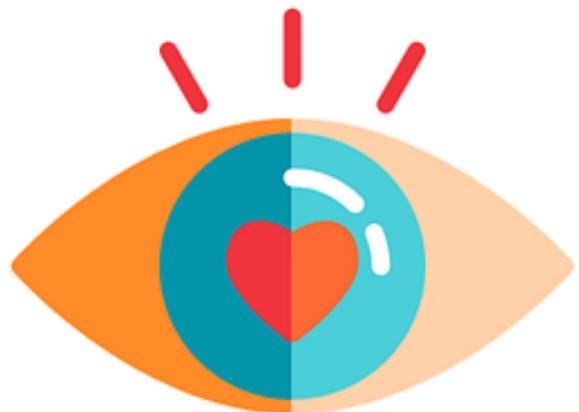
4. EVALUATING UX



EMOTIONAL DESIGN

DONALD NORMAN

3 LEVELS OF EMOTIONAL PROCESSING



VISCERAL

ATTRACTIVENESS
FIRST IMPRESSION
INTUITIVE FEELINGS
IMMEDIATE SENSORY
EXPERIENCE

BEHAVIORAL

USABILITY
PRODUCT FUNCTION
PERFORMANCE
EFFECTIVENESS OF USE

REFLECTIVE

MEANING OF PRODUCT
IMPACT OF THOUGHT
SHARING EXPERIENCE
CULTURAL MEANING

PERSONAS

IDENTIFICATION & DEFINITION

The overwhelmed grandma 	The kindergarten kid 	The stressed professional 	The busy Chalmers student 	The excited tourist 	The disabled fellow 
Circumstances / conditions					
- 70 yrs old and swedish - went grocery shopping and carries two heavy bags	- 6 yrs old and swedish - on a class trip to the Zoo	- 35 yrs old and swedish running late - on a phone call	- 23 yrs old, italian and does not speak swedish - listening to music via headphones	- 42 yrs and french, does speak a bit of swedish not familiar with bus station nor the bus plan - does not speak swedish	- 30 yrs old and swedish - disabled and in a wheelchair
Amount of use					
- takes the bus once per week - tries to avoid rush hours	- first time using the bus together with her kindergarten group	- takes the bus 5 times per week - usually during rush hours	- 3 times per week	- not familiar with bus station nor the bus plan	- taking the bus to visit her friend
Dependency on the bus					
- dependant	- dependant	- dependant	- could potentially walk	- could potentially walk	- dependant

INTERVIEWS

1. INTERVIEW CONDUCTION METHOD

INTERVIEW GUIDE

CREATE DEDICATED QUESTIONS TO ADDRESS ALL
THREE LEVELS OF EMOTIONAL PERCEPTION

CONDUCTION

12 INTERVIEWS TO COVER EACH TYPE OF PERSONAS
MORE THAN ONCE DUE TO OUR BROAD TARGET

2.

UNDERSTANDING

INTERVIEWS

2. THEMATIC ANALYSIS

CLUSTERING

TRANSFERRED DATA INTO A STREAMLINED DOCUMENT

ANALYSIS

REVIEW THE DATA TO UNDERSTAND USER NEEDS:

↳ PAIN POINT → PAIN RELIEVERS

↪ GAIN POINT → GAIN CREATORS



**SAFETY &
COMFORT**

UNDERSTANDING

TARGET PERSONA

LUKAS, 21

-  CHALMERS STUDENT
-  HÄRRYDA SUBURBS
-  BUS USER 5 DAYS A WEEK
-  WAITING TIME 15-30 MIN



USER JOURNEY



AESTHETICS

SENSORY INTERDEPENDENCIES

DIMENSIONS
ASSOCIATIONS
EMOTIONS

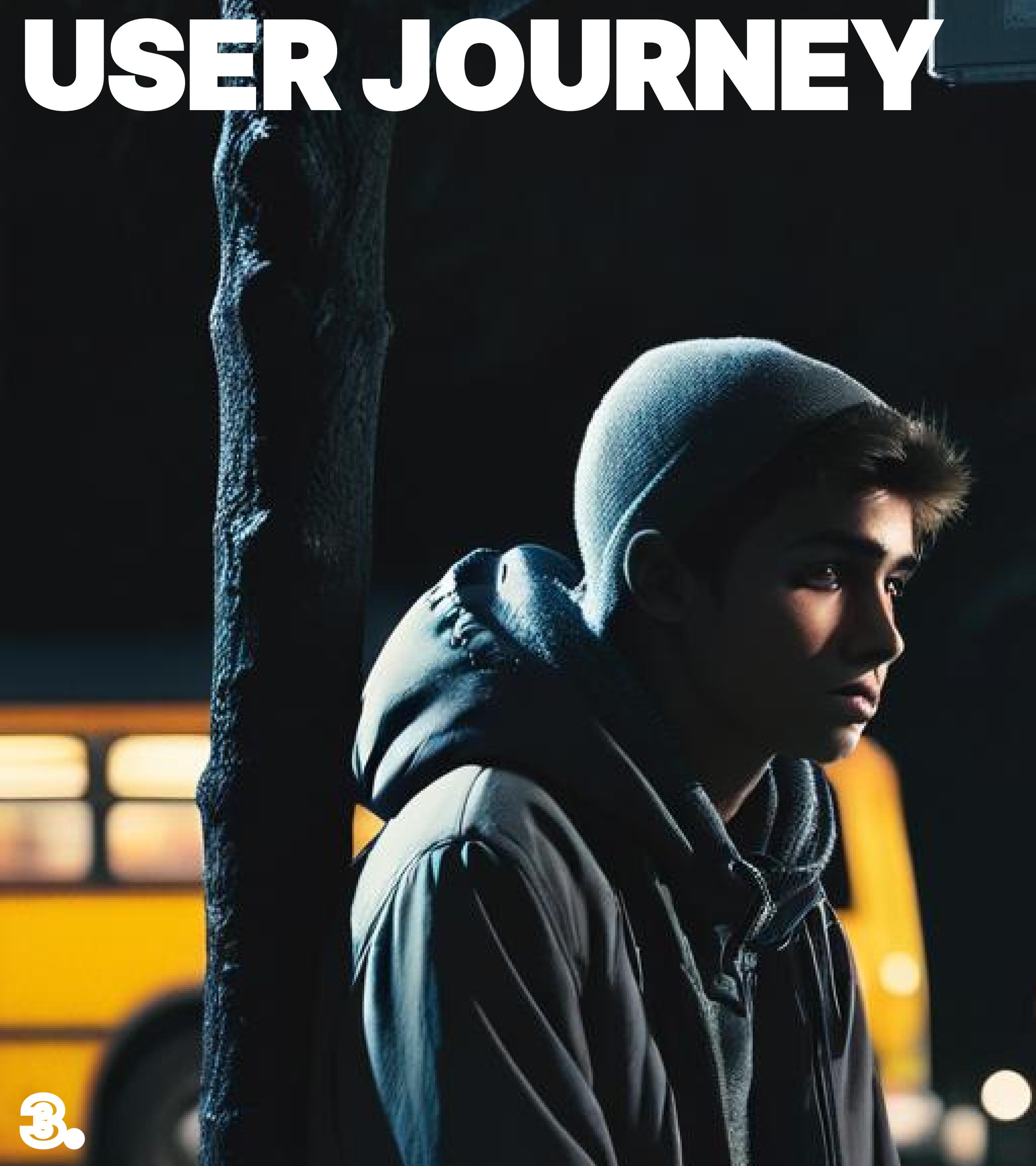
→ **SAFETY &
COMFORT**

CREATING A WELCOMING &
PLEASANT ENVIRONMENT



USER JOURNEY

3.



IDEATION

LIGHT THERAPY



SENSORIAL DESIGN

EMOTIONAL
CONNECTION

AUTOTELIC
SENSORY
INFORMATION

→ **SAFETY &
COMFORT**

ENHANCING VISIBILITY
FEELING SAFE
SENSE OF RELAXATION

USER JOURNEY



3.

IDEATION

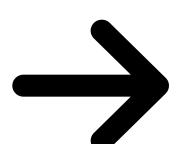
SENSORIAL DESIGN & AI IMPLEMENTATION

ENHANCE

AUTOTELIC

ACCESSIBILITY

**SENSORY
INFORMATION**



**SAFETY &
COMFORT**

**ENHANCING SENSORY EXPERIENCE
FEELING WARM
SENSE OF WELLNESS**



SMART HEATING

IDEATION

USER JOURNEY

3.

IDEATION



LOCAL FOOD DISPENSER



NARRATIVE APPROACH

ASSOCIATION
TO A SENSE OF
COMMUNITY

SUPPORT
LOCAL
FOOD
SUPPLIERS

→ SAFETY &
COMFORT

ENHANCING WAITING TIME
FEELING SATISFIED

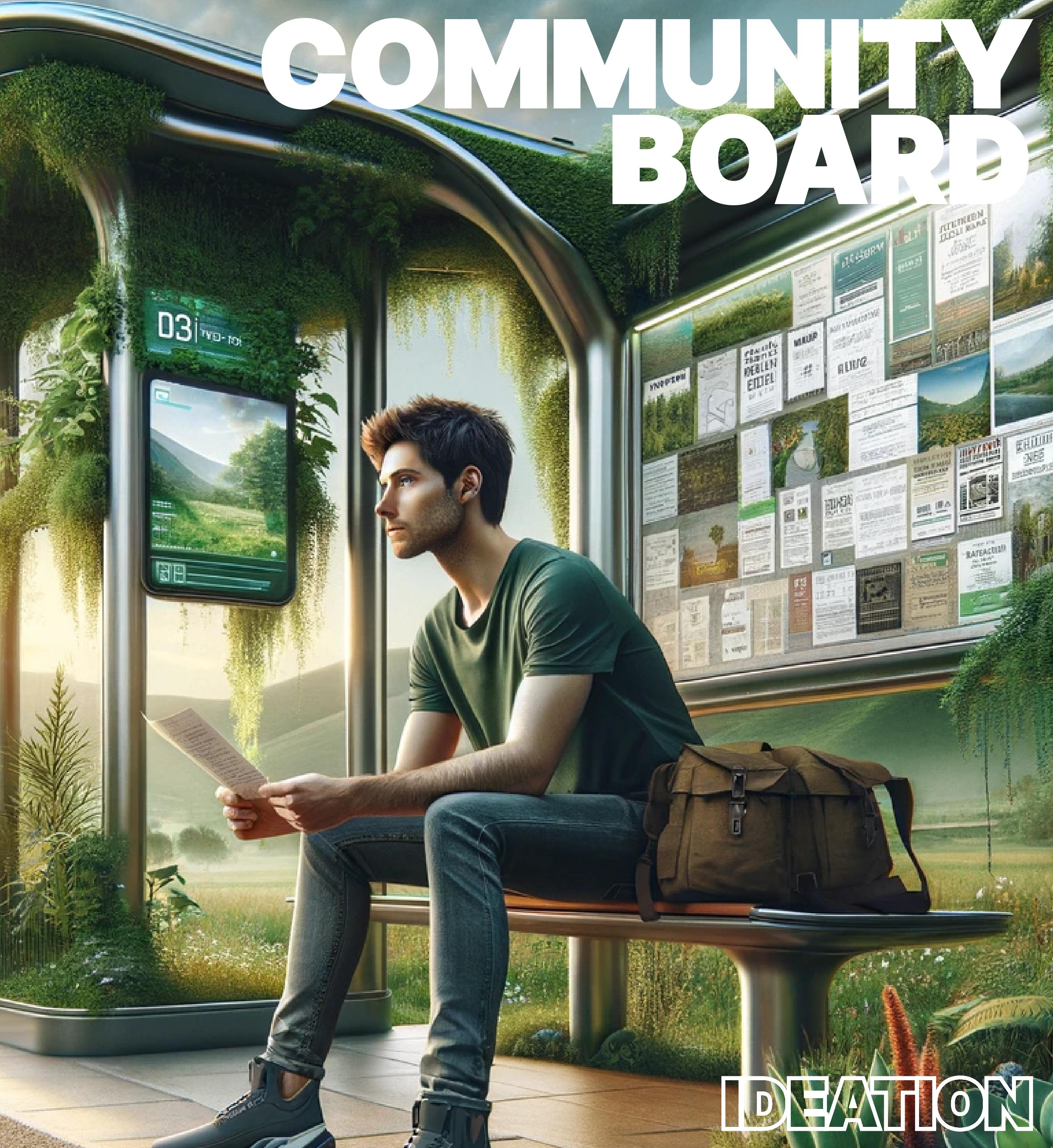
NARRATIVE APPROACH

SUPPORT
COMMUNITY

FOLLOW
LOCAL
BUSINESSES
AND STORIES

→ SAFETY &
COMFORT
SENSE OF BELONGING
FEELING INFORMED

COMMUNITY BOARD



IDEATION

UX EVALUATION

USER EXPERIENCE QUESTIONNAIRE

QUANTITATIVE DATA

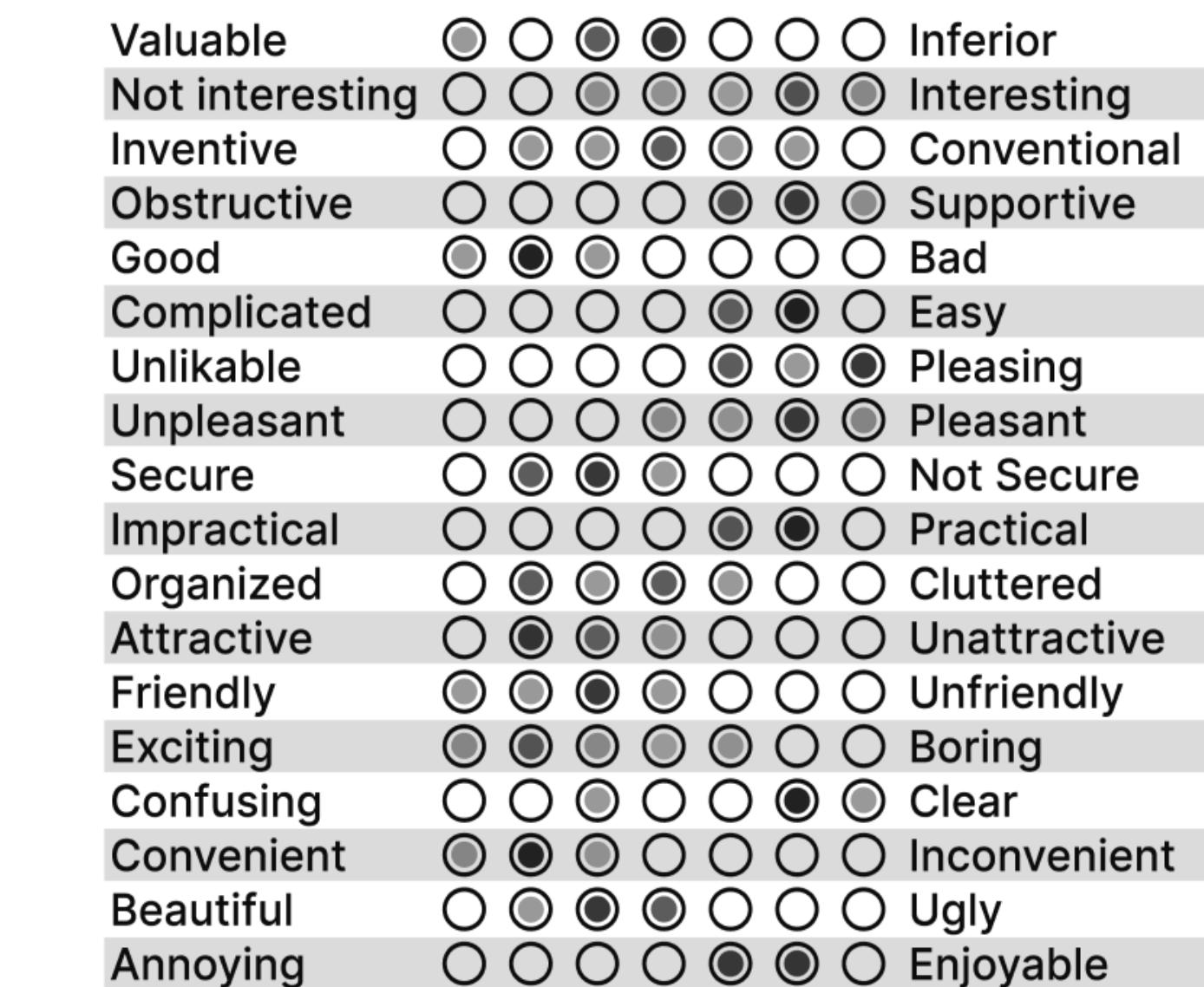
EASIER TO EVALUATE DATA FROM A LARGE NUMBER OF RESPONDENTS

FAST

PREVENTS US FROM TAKING TOO MUCH OF THE COMMUTERS TIME

CONSIDERS ALL ASPECTS OF EMOTIONAL DESIGN

- VISCERAL (E.G. ATTRACTIVE VS UNATTRACTIVE)
- BEHAVIORAL (E.G. BORING VS EXCITING)
- REFLECTIVE (E.G. VALUABLE VS INFERIOR)

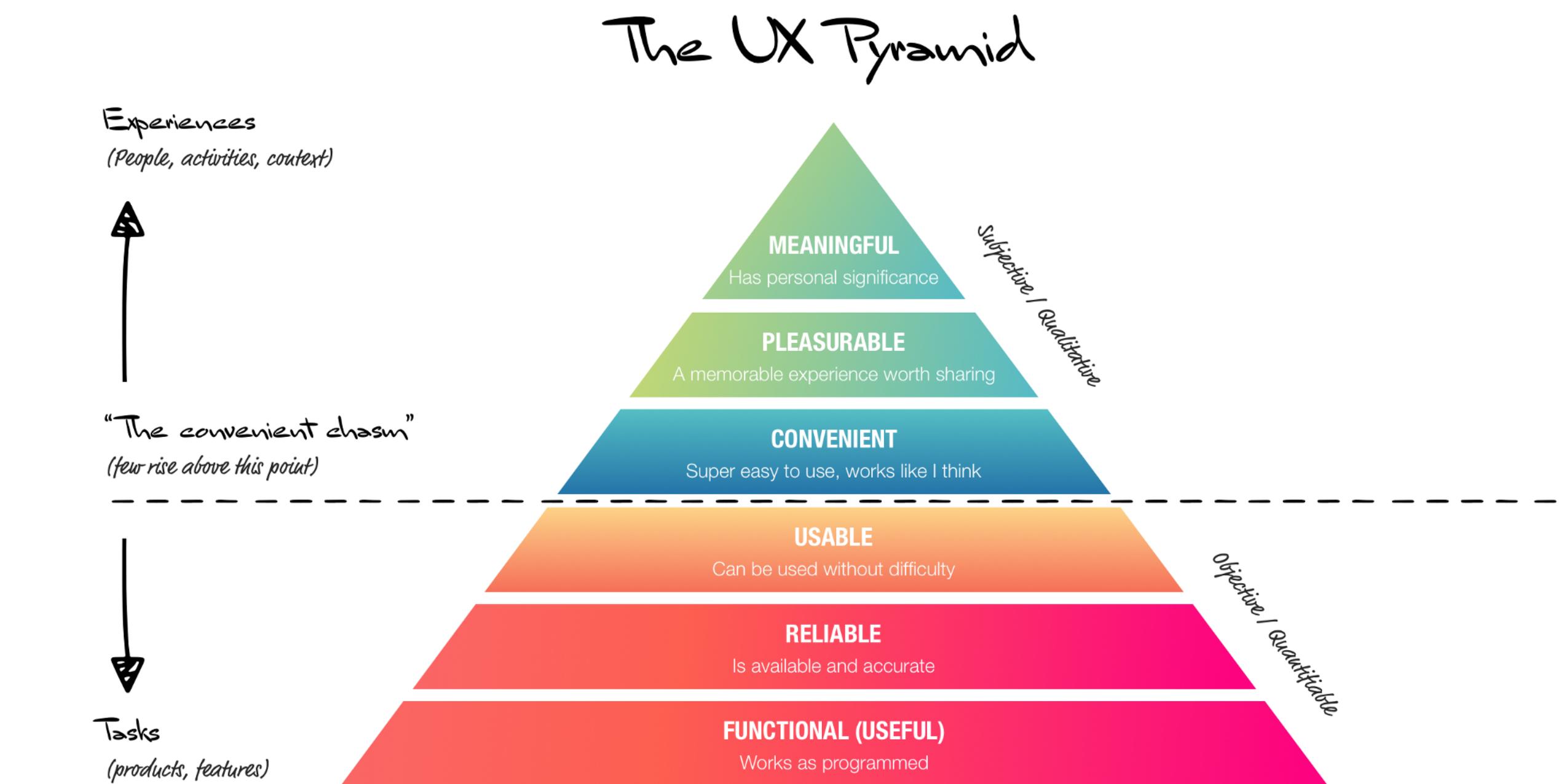


CONCLUSIONS

CASE CRITERIA

- PRACTICAL
- ECONOMICALLY VIABLE
- ENVIRONMENTALLY FRIENDLY

MEANINGFUL EXPERIENCE



THANK YOU



APPENDIX

DATA CLUSTERING

IDENTIFYING THEMES

Pain Points	Interview	Pain Reliever
Poor lightening	Student Elderly Person Disabled Person Professional 1 Professional 2	bright environment and open design
Feel unsafe because there's no safety camera	Student Elderly Person	Have an entry/exit SOS Button
Insufficient seating area	Tourist Student	More efficient seating space
Inadequate heating system	Tourist	Solar panels to power heating/ smart heating
Feel unsafe because shelter only has one entrance	Student	Make two entrances to be able to take the other exit if the other one is blocked
Isolation	Elderly person	"encapsulated design"
Poor maintenance	Elderly person	better materials matching the weather conditions
no raincover for seating	Student	Shelter
Frame the waiting area with lights	Disabled Person	Lights on the ground

Gain Points	Interview	Gain Creators
Option to buy food and drinks	Professional Disabled Person	Placing a Vending Machine next to the bus station with local food
Option to charge devices	Student Tourist	Place an outlet to charge phones incl. cables
Create a sense of community among bus users	Tourist Professional Elderly Person	<ul style="list-style-type: none"> Community board (leave message/ share recommendations with other commuters) Multiplayer game board / interactive (art) games information board about what's going on in the city/community/initiatives book shelf
Make it look even nicer	Professional Elderly Person Disabled Person	Integrate it into the landscape by adding elements of plants/greens to the bus station design
Option to buy tickets	Professional	contact-less top up machine/easy to use machine
Dedicated place for some gymnastics	Elderly Person	Consider extra spot, maybe even guided by instructed gymnastics workout (on paper or digital with QR Code)
Option to read something at the bus station	Elderly Person	Create a small "Library" where people exchange books or just updated news paper behind a glass/screen
Option to receive accurate updates about bus arrival timings	Student	Want to see the waiting time
Option to refill water	Disabled Person	Water dispenser
Option to take photos with friends	Disabled Person	Fotobox

APPROACH