Joint Objectives What do we intend to achieve together?	Joint Commitments Who does what and with whom?	Joint Resources What resources do we need?	Joint Risks What can prevent us from succeeding?
		5	

### Ethical considerations checklist

#### Specification of objectives

Include all stakeholders who may be affected by the system directly or indirectly. They should be diverse (gender, age, ethnicity, etc.)

Assess whether the design objectives

- . respect human well-being
- . pursue beneficial outcomes for people
- . respect user's values and rights
- . answer user's needs

#### Specification of requirements

Consider mapping out your understanding of your users' values and aligning the systems' actions accordingly

Assess the compatibility of your proposed design specifications, constraints, resources and infrastructure with the ethics requirements and values

Define metrics to measure the effectiveness of the system in meeting its objectives

**DEFINE** 

#### High-level design

Consider always adopting a humancentric approach

Make sure that the users remain in control of the system

Design mechanisms so that people will know when they are being subject to the decisions of the system

The system should be able to provide sufficient explanation for prediction, recommendation or decision taken

IDEATE

#### **EMPATHIZE**

### Ethical considerations checklist

#### Data collection and preparation

Assess how operations within each process might violate ethical and/or data protection requirements

Ensure that the processing of personal data complies with the GDPR and other relevant legislation

Protect users' data from theft, misuse, or data corruption

Ensure people's data is un-biased, representative and reflects their diversity

PROTOTYPE

#### Detailed design and development

Use formal methodologies and tools to ensure explainability of the system

Institute technical and organisational measures to achieve data protection by design and by default (such as Privacy by Design methodologies)

Make sure the code is actively explained and documented

Refine and complete the project's ethical requirements document (iterative)

**PROTOTYPE** 

#### Testing and evaluation

Ensure traceability, including in relation to datasets, processes and decisions made during the system lifecycle

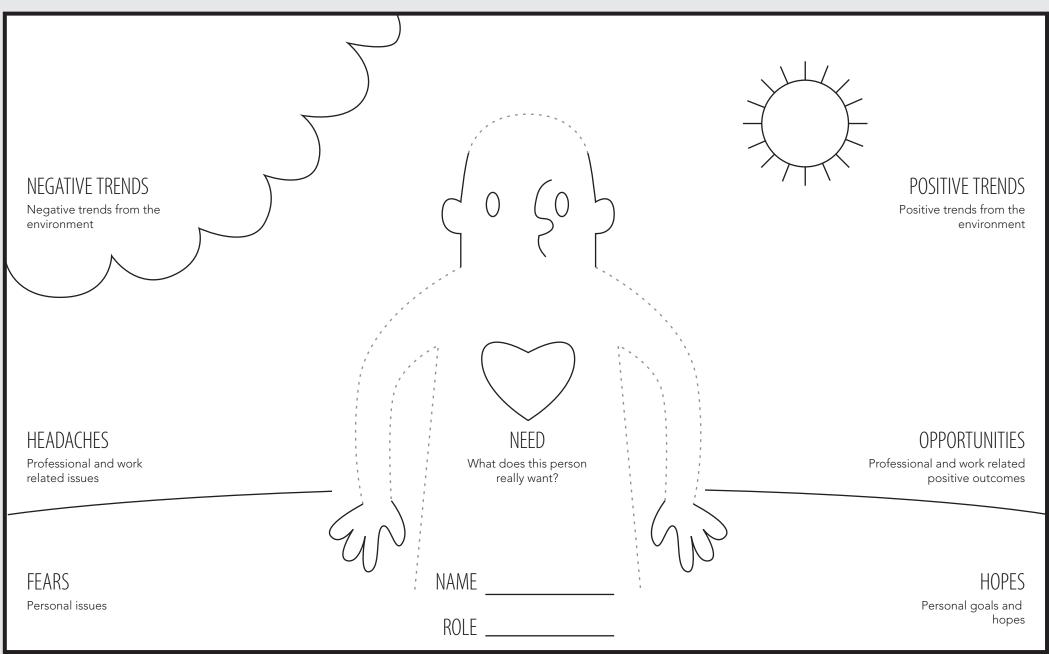
Train the users (if necessary ) and specify the types and levels of knowledge necessary to understand and operate the system

Establish processes to obtain and consider users' feedback and mechanisms to adapt the system in response

**TEST** 

#### **PERSONA CANVAS**















OBJECTIVE

Understand your customer's world in more detail

OUTCOME

Map of your customer's day

Dive deep into your (potential) customers' worlds to gain insights about their jobs, pains, and gains. What customers do on a daily basis in their real settings often differs from what they believe they do or what they will tell you in an interview, survey, or focus group.

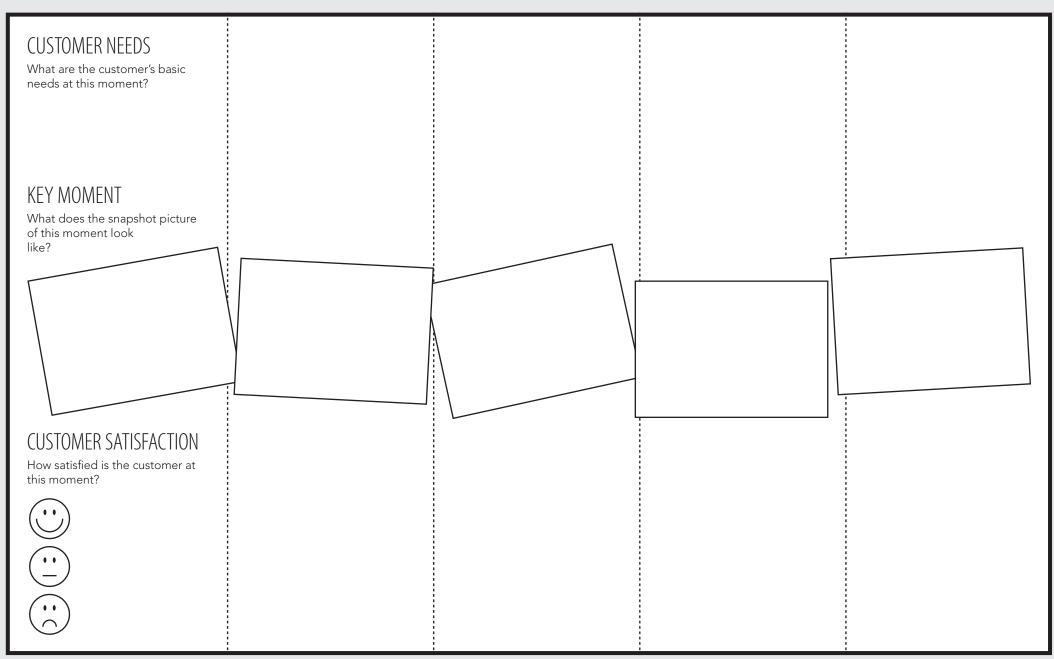
Capture the most important jobs, pains, and gains of the customer you shadowed

Time	Activity (what I see)	Notes (what I think)



#### **CUSTOMER JOURNEY CANVAS**



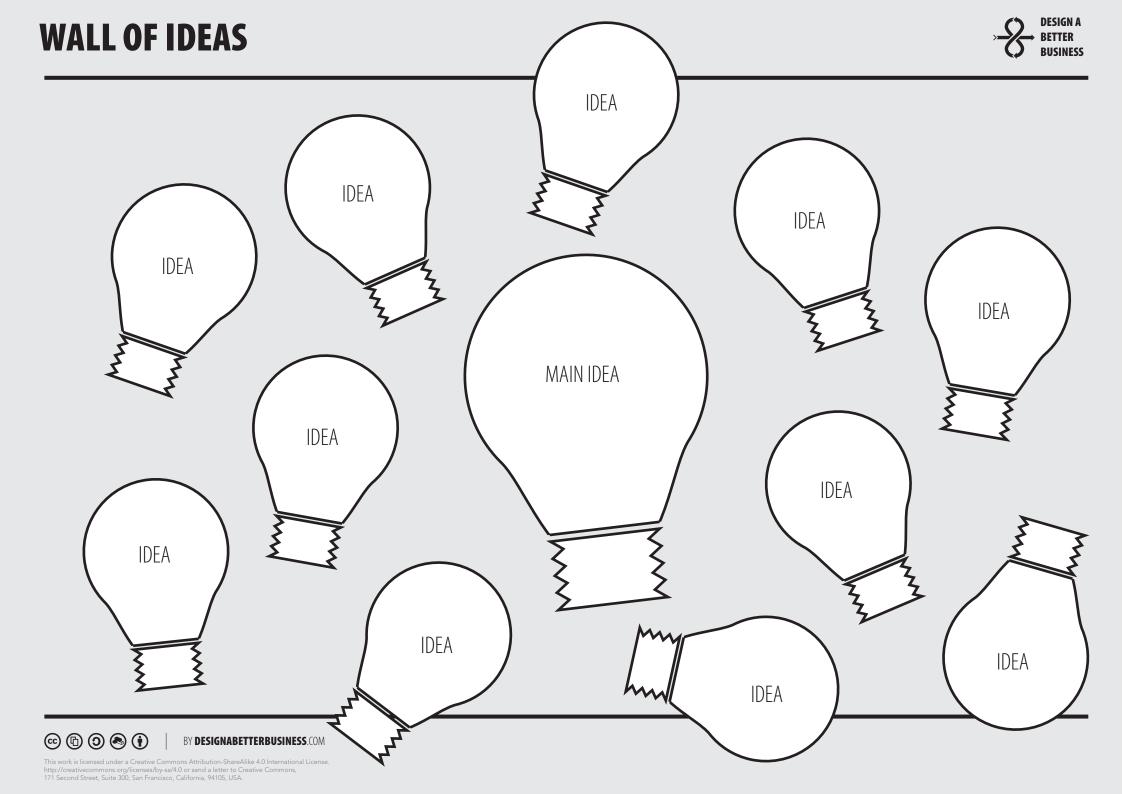












#### **DESIGN CRITERIA CANVAS**



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Must-haves and non-negotiables

#### SHOULD

Should-haves and important features

#### COULD

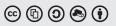
Could-haves and optional features

#### WON'T

Won't haves - things that are definitely not on the table. Also non-negotiables.



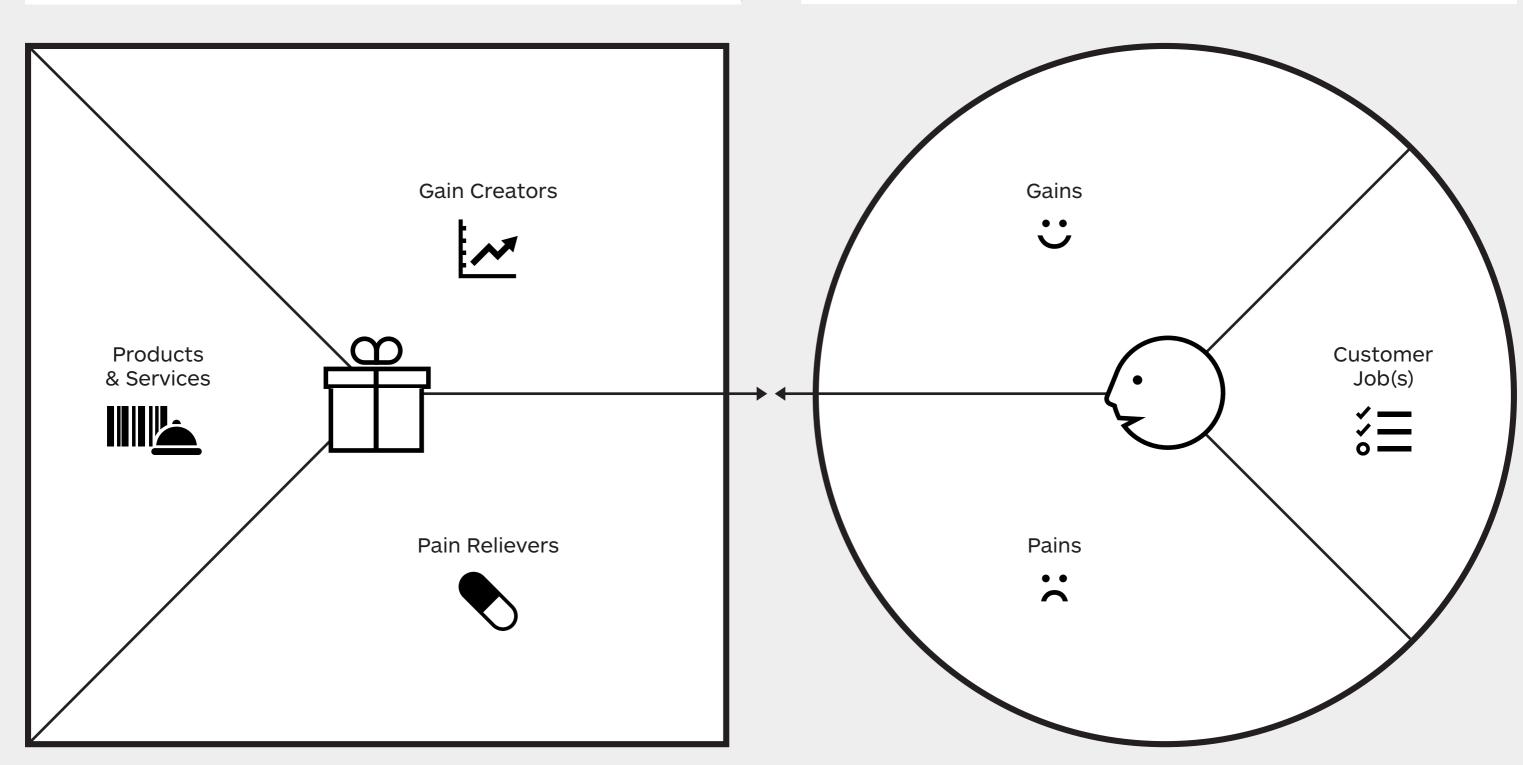




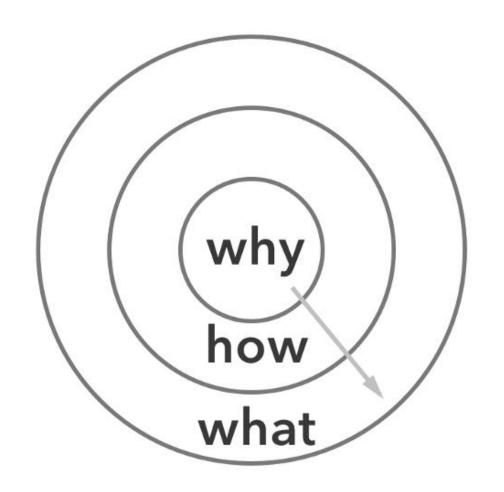
### **The Value Proposition Canvas**



Value Proposition



Customer Segment



# Start with why

the purpose, belief, mission, reason for existing, besides profit

the value proposition, differentiator, process

the actual app, product, feature, or thing

Project Title:

### **Ethics Canvas**

Date:

Ethics Canvas v1.8 - ethicscanvas.org © ADAPT Centre & Trinity College Dublin & Dublin City University, 2017

#### Individuals affected

Identify the types or categories of individuals affected by the product or service, such as men/women, user/non- user, age-category, etc.

#### Behaviour

Discuss problematic changes to individual behaviour that may be prompted by the application e.g. differences in habits, time-schedules, choice of activities, people behaving more individualistic or collectivist, people behaving more or less materialistic.

#### What can we do?

Select the four most important Ethical impacts you discussed. Identify ways of solving these Impacts by changing your project's product/service design, organisation.Or by providing recommendations for its use or spelling out more clearly to users the values driving the design

#### Worldviews

Discuss how the general perception of somebody's role in society can be affected by the project,

#### Groups affected

Identify the collectives or communities, e.g. groups or organisations, that can be affected by your product or service, such as environmental and religious groups, unions, professional bodies, competing companies and government agencies, considering any interest they might have in the effects of the product or service.



#### Relations

Discuss problematic differences in individual behaviour such as differences in habits, time-schedules, choice of activities, etc



Group Conflicts

Discuss the impact on the relationships between the groups identified, e.g. employers and unions













#### Product or Service Failure

Discuss the potential negative impact of your product or service failing to operate as intended, eg technical or human error, financial failure/receivership/acquisition, security breach, data loss, etc.



#### Problematic Use of Resources

Discuss possible negative impacts of the consumption of resources of your project, e.g. climate impacts, privacy impacts, employment impacts etc.





#### Ad-Lib Value Proposition Template

Ad-libs are a great way to quickly shape alternative directions for your value proposition. They force you to pinpoint how exactly you are going to creating value. Prototype three to five different directions by filling out the blanks in the ad-lib below.

#### **OBJECTIVE**

Quickly shape potential value proposition directions

Alternative prototypes in the form of "pitchable" sentences

### Our

Products and Services

## help(s)

Customer Segment

### who want to



verb (e.g., reducing, avoiding)



and a customer pain

and

→ verb (e.g., increasing, enabling)



(and a customer gain

(unlike



competing value proposition





# Design of assistive technologies for the ageing population: a transdisciplinary training







#### **EXPECTED OUTCOMES**

- One pager (your proposed solution)
- Final pitch

#### **RULES FOR THE PITCH**

- Make sure you apply the theoretical knowledge aguired during the week

#### **PITCH EVALUATION CRITERIA**

- Originality and clarity of the pitch
- Ethical considerations

- Feasibility of the solution



















Design of assistive technologies for the ageing population: a transdisciplinary training



29.08 to 02.09.2022

### **Evaluation**

Jury name:	 -
,	

Rating scale: 1 to 10

Group	Pitch orginality	Innovation	Usefulness	Ethics	Feasability	Total
Group #1						
Croup #2						
Group #3						

Group #1 :	 	 
Group #2 :	 	 
Group #3 :	 	 







