



Technology Leaving
No One Behind

Principle Prompt Cards

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BEVICA

Principle Prompt Cards

Stress test your solutions. Are your solutions following the principles of Universal Design, or are you leaving a market segment behind?

The overall purpose of the Principle Prompt Cards is to challenge your ideas.

The principles can be used to evaluate and reflect upon existing solution and early stage concepts for further iterations in order to accommodate a universal design process not excluding anyone.

Acknowledgments

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The cards are designed using pictures from freepik.com and unsplash.com

Contact DTU Skylab on www.skylab.dtu.dk

Equitable Use

Is the design useful to people with diverse abilities?

Prompts

- Means of use is identical or equivalent for all users.
- No one is segregated or stigmatized.
- Safety and security are equally available to all users.

Example: *Curb Cut*



Flexibility in Use

Does the design accommodate a wide range of individual preferences and abilities?

Prompts

- Provide choice such as right or left-handed use
- Allow for different levels of accuracy
- Allow for people who may do things at a different pace

Example: *Adjustable desks*

Simple and Intuitive

Is the use of the design easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level?

Prompts

- Keep it simple and consider what the user may be expecting
- Allow for different literacy and languages
- Provide prompts and feedback

Example: *Assembly instructions*



Perceptible Information

Can the design communicate information effectively to the user, regardless of ambient conditions or the user's sensory abilities?

Prompts

- Make it easy to provide directions or instructions
- Create compatibility for different devices or techniques used by people with sensory disabilities

Example: *Tactile pavement*



Tolerance for error

Does the design minimize hazards and the adverse consequences of accidental or unintended actions?

Prompts

- Arrange commonly used elements where most accessible and hazardous elements either removed or shielded
- Provide warnings and fail safe features

Example: *Undo*



Low physical effort

Can the design be used efficiently and comfortably and with a minimum of fatigue?

Prompts

- Use operating forces that are reasonable
- Minimize repetitive actions
- Minimize the need for a sustained physical effort

Example: *Automatic soap dispenser*

Size & space for approach & use

Is appropriate size and space provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility?

Prompts

- Allow for a comfortable reach whether sitting or standing
- Provide space for someone using an assistive device or the assistance of another person or support animal

Example: *Wide access*



Affordable for all

Is pricing considered, so that people no matter their economic status have access?

Prompts

- What is the socioeconomical status of the users?
- Could the design be adjusted to offer a more affordable solution?
- Could the price point be altered to accommodate a larger user group?

Example: *Subscription model*




Available everywhere

Can the system be accessed no matter the location?

Prompts

- Does geographical location of the users impact your solution?
- Is the solution usable in areas with little/no access to internet or power?
- Is your solution available in areas with little/no infrastructure?

Example: *Sourcing materials*



Accessible support systems

Is there easy access to support systems?

Prompts

- Are the support systems available to users with diverse abilities?
- Does the support system require technical knowledge?
- Is the support system easily located/ accessed by the users?
- Is maintenance of system easily conducted?

Example: *Right to repair*

A person's hand is pointing at a tablet screen. The background is a blurred image of a person's face and hands. The text 'Flexibility in ownership' is overlaid in white on a purple gradient background.

Flexibility in ownership

Does the design open up for alternative ownership models than one buyer, one owner?

Prompts

- Does the solution require the user to be a sole owner?
- Can the solution be co-owned or rented by users?
- Can the solution be sustained by flexible payment schemes?

Example: *Car-sharing*



Life extending ownership

Does the design allow for performing procedures to extend the lifespan of the design?

Prompts

- Can the solution be refurbished?
- Can the solution be upcycled?
- Can users re-sell the solution to other users?
- Could the organization provide buy-back services?

Example: *Refurbishment programs*



Beneficial for all

Is the design equally beneficial for all?

Prompts

- Is the solution equally beneficial for the users, the organization, the society, the environment, etc.?
- How can you ensure a solution that benefits different stakeholders equally to the largest extent?

Example: *Symbiotic relationships*



Leaving no one behind

Does the design leave some one behind, so they are not able to use the design?

Prompts

- Have you considered reducing inequalities?
- Have you considered equal opportunities for everyone?

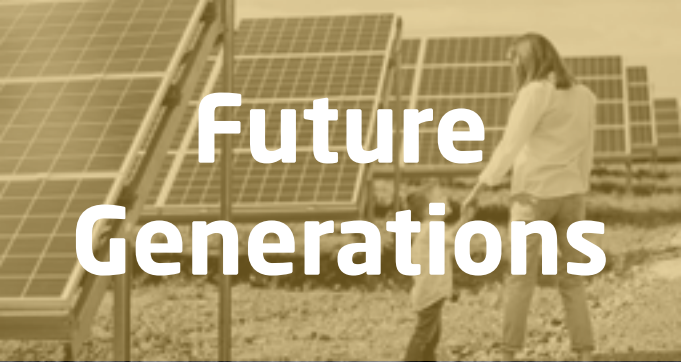


Human Rights

Is there a possibility that the design can violate human rights?

Prompts

- Have you taken international laws that protect human behaviour into consideration?

A woman and a child are walking through a solar farm. The woman is wearing a light-colored long-sleeved shirt and dark pants, and the child is wearing a dark jacket and pants. They are walking on a gravel path between rows of solar panels. The background shows more solar panels stretching into the distance under a clear sky.

Future Generations

Does the design account for the well-being of future generations?

Prompts

- Ethical considerations for needs of future generations
- Have you considered whether future generations will have the resources needed to sustain life?

Incentivizing ethical behavior

Is the design incentivizing ethical behavior through its use?

Prompts

- Does your solution send a signal that ethics are important?
- Does your solution promote honesty, fairness and equity?



Incentivizing sustainability

Does the design incentivize social, environmental & economical sustainability?

Prompts

- Does your solution aim for humans to safely inhabit the Earth for coming centuries?
- Have you considered if your solution could affect the well-being of others?