Public Stack reflection cards

The Public Stack Reflection Cards prompt reflection about your technology, its development, and the values it promotes. They are best used together with a team in a live setting.

Print your own copy at publicstack.net/cards

What is the public stack?

The public stack is a way to uncover how the hidden layers behind technology relate to public values. You can take a public stack approach by:

→ identifying the public values in your project's **foundation**
→ facilitating an open and participatory **design process**
→ developing open source, fair, inclusive, and privacy-by-design **technology**
→ positively impacting **people & the planet**

Learn more at publicstack.net

How and when to use this?

Play, use, share or repurpose the cards however you see fit – whether at the beginning or during a development process that is already underway. In our experience it works best to discuss cards out loud as a team, with at least one other person present. Try documenting your answers as you go with sticky notes or a large canvas.

If this is your first experience with the public stack, we recommend starting out with the **foundation** cards.

Who made this?

Waag Futurelab contributes to the research, design and development of a sustainable, just society.
waag.org

public values

→ List the public values at the core of the project.

→ How are public values embedded in the project?

stakeholders

→ Who does this project belong to and who are the other stakeholders?

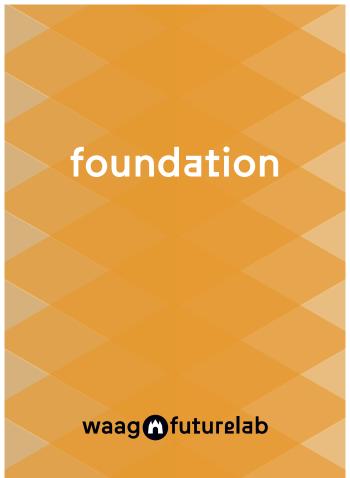→ Who is affected by this project, but not directly involved?

starting points & assumptions

→ What problem does the project intend to solve?

→ When will the problem be solved? Who defines success?

governance & oversight I

→ What current mechanisms of governance are in place?

→ What resources and processes need to be governed in the project?

foundation

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governance & oversight II

→ How can society monitor the project?

→ How is external (governmental or other) assessment ensured?

socio-economic considerations

→ How is the project financed? How does this impact the project?

→ Who might (economically, politically, socially) benefit from the project? At whose expense?

→ How is the technology maintained after its release?

open & participatory methods I

→ What methods are used in the project's development?

→ Is the design process participatory? Who facilitates co-creation? Who is included?

→ Which public values does the design process put into action? How?

open & participatory methods II

→ What mandate does the general public have to govern the design process?

→ How is transparency assured in the process?

→ Does the design process allow the project to change course based on feedback from the public?

foundation

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design
process

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users' journeys

→ Whose lived experiences are represented in the user journeys? Who is excluded or not represented in user journeys?

→ Who can and cannot use the technology?

→ Is the technology used in isolation, or as part of a group/community/ network?

layers of technology I

→ What is the application, and is it in line with public values?

→ What is the operating system, and is it in line with public values?

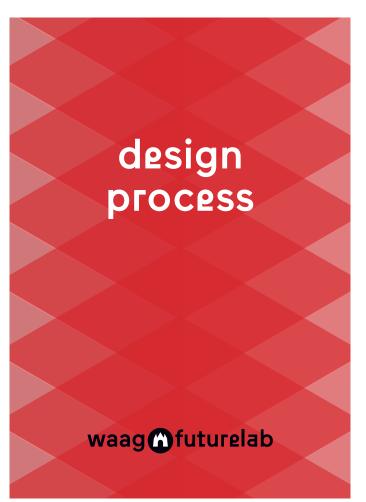→ What are the firmware and drivers, and are they in line with public values?

layers of technology II

→ What is the equipment, and is it in line with public values?

→ What is the infrastructure, and is it in line with public values?

→ Does the technology / product / service stand on its own or is it part of a larger ecosystem?

data I

→ What data passes through the technology?
With whom is it shared, why, and under what conditions?

→ What data is stored?
Where, why, and under what conditions?

→ When is data deleted? Do people have a right to be forgotten? How is this facilitated?

technology

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design
process

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technology

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technology

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data II

→ Could the project potentially pose any threat to privacy or personal data control?

→ How is data sharing consent obtained and managed?

→ How does the project actively protect users' data?

data III

→ How do you encourage related, linked, and interdependent technologies to follow better (more secure, private, minimised) personal data practices?

→ Briefly sketch your data flow. How is this data flow in line with public values?
Where could it be improved, and how?

people I

→ How are 'end-users' positioned (e.g. as consumers, citizens, subjects)?

→ Are citizens enabled to advocate for their rights and interests in relation to this technology?

people II

→ How does the final product or service impact society?

→ How does the project merit public trust? How might it erode public trust?

people &
planet

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technology

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technology

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planet

→ What is the project's environmental footprint?
What resources does it consume and require?
What resources does it protect?

→ Is the project in line with the Sustainable Development Goals?
Is it in line with local sustainability targets?

reflecting on the whole I

→ Where are the design process and technical layer in line with public values?

→ Where does the design process struggle (perhaps due to time, budget, context, or technical feasibility) to fully adhere to public values?

reflecting on the whole II

→ What are external impacts of the project (e.g. on the environment, nonusers)?

design dilemmas I

→ Where would you map the project on this continuum, and why?

open ————————————— **closed**

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design
dilemmas II

→ Where would you map the project
on this continuum, and why?

|——————————————————————|

anonymous users   identifiable users

design
dilemmas III

→ Where would you map the project
on this continuum, and why?

|——————————————————————|

user control   automatic processes

design
dilemmas IV

→ Where would you map the project
on this continuum, and why?

|——————————————————————|

decentralised   centralised

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