Running Co-Design Process in Practice

How to turn your scoping review into a checklist that works

NOKIA BELL LABS

Part 1

Understanding co-design process and why it matters for your project?

Part 2

Setting up the co-design process

Part 3

Iterating session outputs: what real change looks like?

Part 4

Running a co-design session: practical guidance

Part 5

Avoiding common co-design process pitfalls

NOKIA BELL LABS

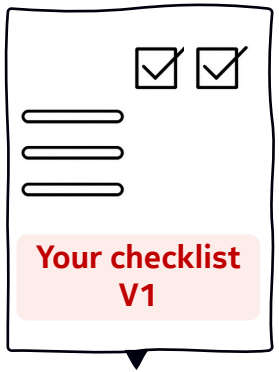
Part 1

Understanding co-design and why it matters for your project?

What co-design process is not…

What co-design process is not…

What co-design process is…



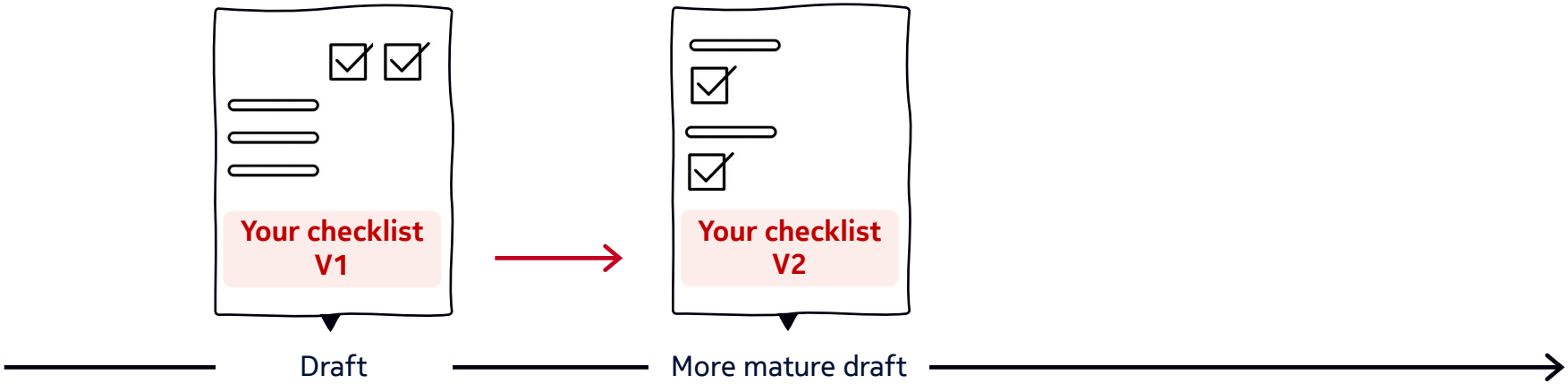
Draft

Co-design session 1:

- What makes AI at work feel safe to you?
- What's missing from this list?
- What would you remove?

NOKIA BELL LABS

What co-design process is…

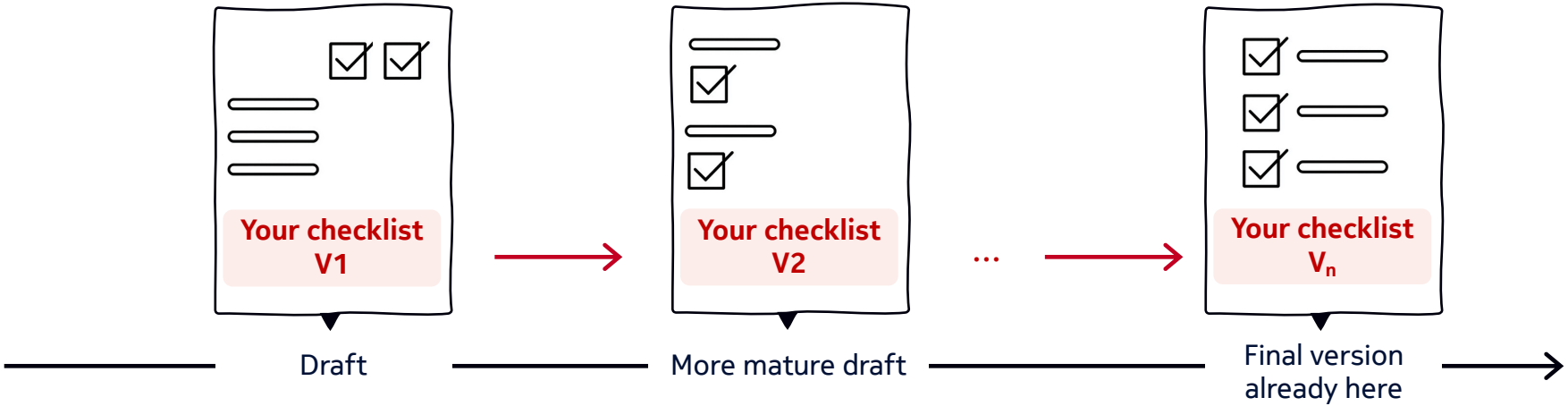


Co-design session 2:

- What's missing from this list?
- What would you remove?
- What's hardest to implement here?
- Would you trust a tool that passed this?

NOKIA BELL LABS

What co-design process is…



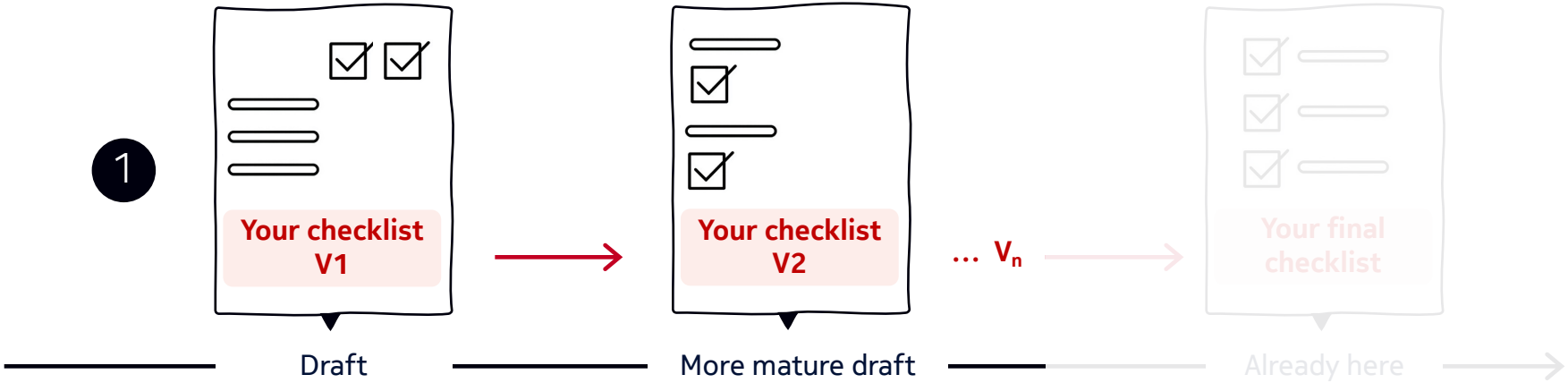
User testing:

Did you use it?
How long did it take?
Does it fit your workflow?

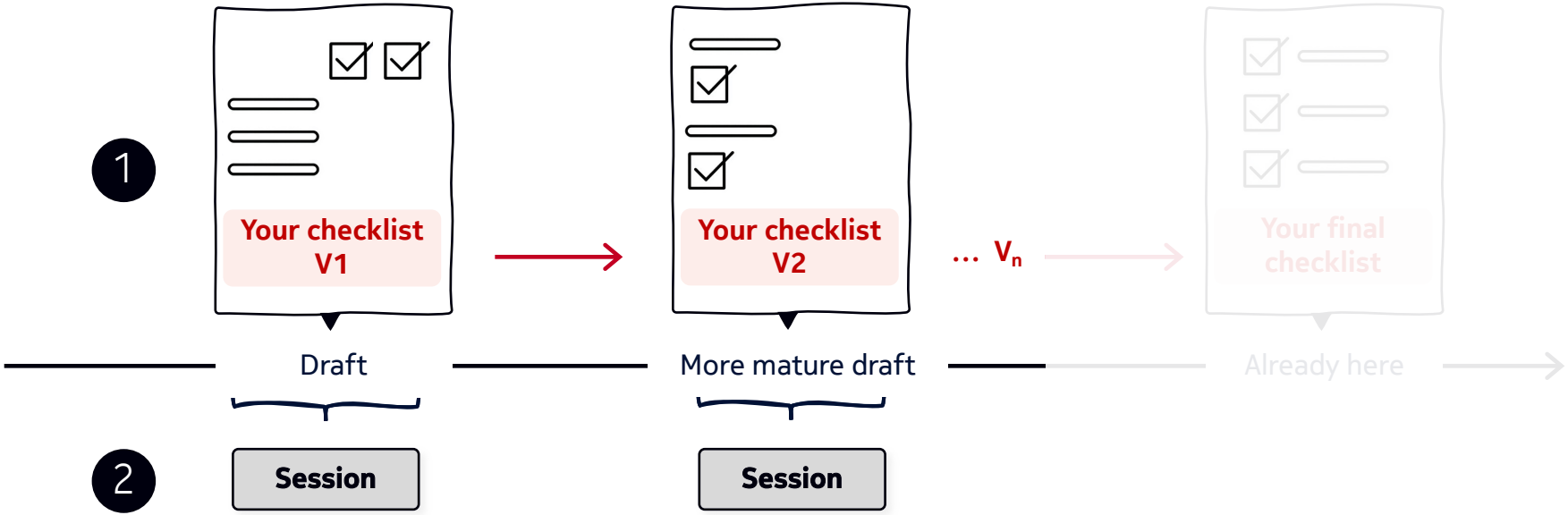
Part 2

Setting up the co-design process

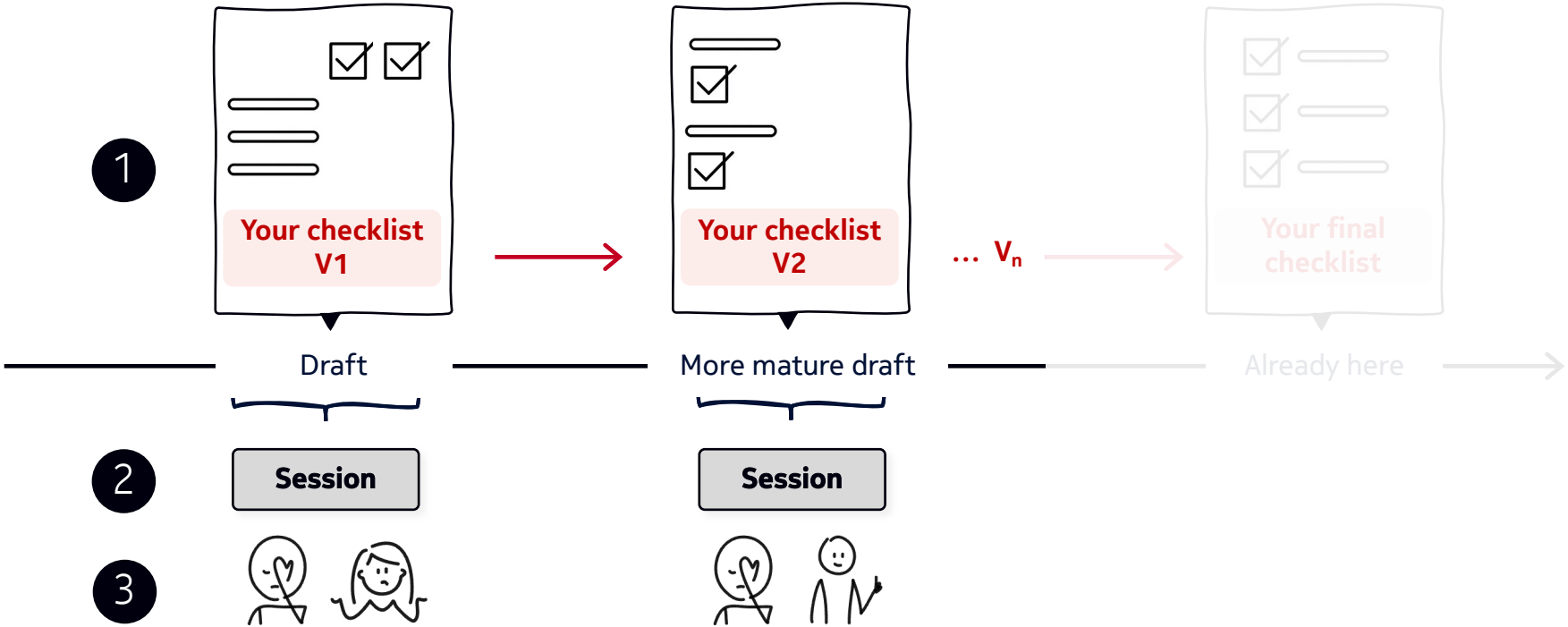
Co-design process = drafts



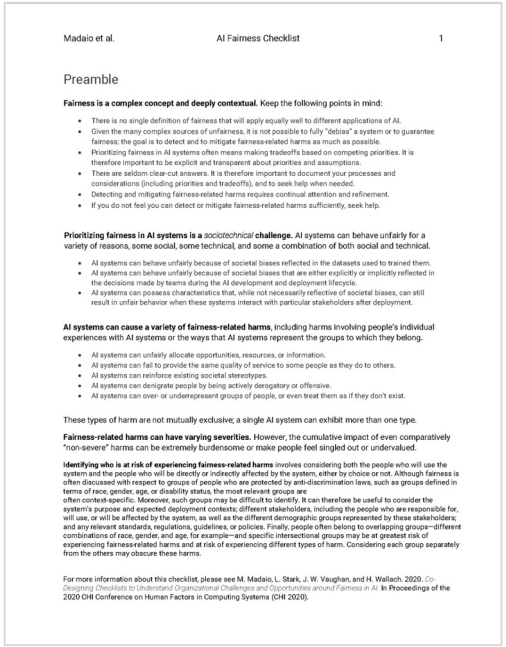
Co-design process = drafts, procedure for sessions



Co-design process = drafts, procedure for sessions, participants



Two examples of co-design processes



Madaio et al. AI Fairness Checklist 1

Preamble

Fairness is a complex concept and deeply contextual. Keep the following points in mind:

- There is no single definition of fairness that will apply equally well to different applications of AI.
- Given the many complex sources of unfairness, it is not possible to fully "debias" a system or to guarantee fairness; the goal is to detect and to mitigate fairness-related harms as much as possible.
- Prioritizing fairness in AI systems often means making tradeoffs based on competing priorities. It is therefore important to be explicit and transparent about priorities and assumptions.
- There are seldom clear-cut answers. It is therefore important to document your processes and considerations (including priorities and tradeoffs), and to seek help when needed.
- Detecting and mitigating fairness-related harms requires continual attention and refinement.
- If you do not feel you can detect or mitigate fairness-related harms sufficiently, seek help.

Prioritizing fairness in AI systems is a *sociotechnical* **challenge.** AI systems can behave unfairly for a variety of reasons, some social, some technical, and some a combination of both social and technical.

- AI systems can behave unfairly because of societal biases reflected in the datasets used to trained them.
- AI systems can behave unfairly because of societal biases that are either explicitly or implicitly reflected in the decisions made by teams during the AI development and deployment lifecycle.
- AI systems can possess characteristics that, while not necessarily reflective of societal biases, can still result in unfair behavior when these systems interact with particular stakeholders after deployment.

AI systems can cause a variety of fairness-related harms, including harms involving people's individual experiences with AI systems or the ways that AI systems represent the groups to which they belong.

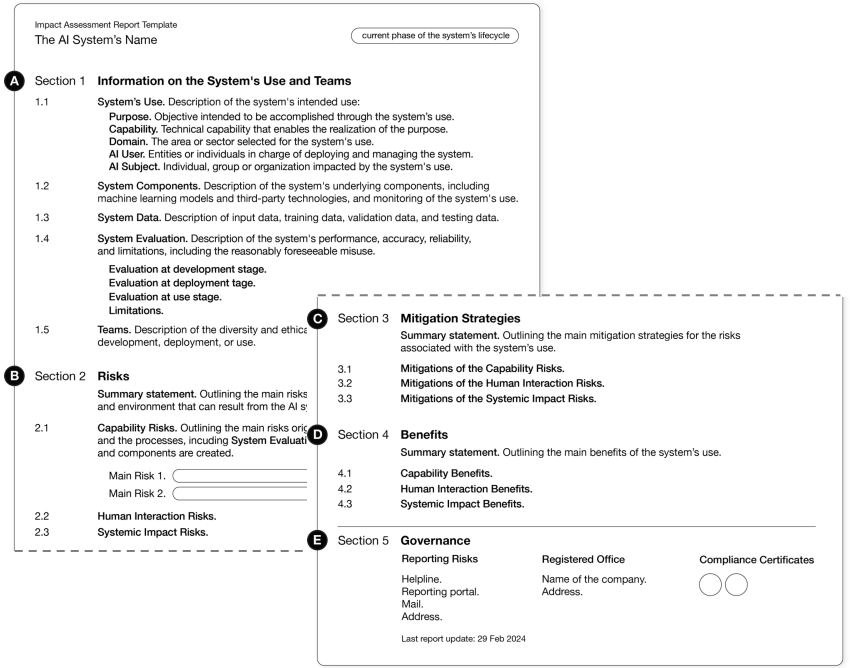
- AI systems can unfairly allocate opportunities, resources, or information.
- AI systems can fail to provide the same quality of service to some people as they do to others.
- AI systems can reinforce existing societal stereotypes.
- AI systems can denigrate people by being actively derogatory or offensive.
- AI systems can over- or underrepresent groups of people, or even treat them as if they don't exist.

These types of harm are not mutually exclusive; a single AI system can exhibit more than one type.

Fairness-related harms can have varying severities. However, the cumulative impact of even comparatively "non-severe" harms can be extremely burdensome or make people feel singled out or undervalued.

Identifying who is at risk of experiencing fairness-related harms involves considering both the people who will use the system and the people who will be directly or indirectly affected by the system, either by choice or not. Although fairness is often discussed with respect to groups of people who are protected by anti-discrimination laws, such as groups defined in terms of race, gender, age, or disability status, the most relevant groups are often context-specific. Moreover, such groups may be difficult to identify. It can therefore be useful to consider the system's purpose and expected deployment contexts; different stakeholders, including the people who are responsible for, will use, or will be affected by the system, as well as the different demographic groups represented by these stakeholders; and any relevant standards, regulations, guidelines, or policies. Finally, people often belong to overlapping groups—different combinations of race, gender, and age, for example—and specific intersectional groups may be at greatest risk of experiencing fairness-related harms and at risk of experiencing different types of harm. Considering each group separately from the others may obscure these harms.

For more information about this checklist, please see M. Madaio, L. Stark, J. W. Vaughan, and H. Wallach. 2020. *Co-Designing Checklists to Understand Organizational Challenges and Opportunities around Fairness in AI*. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI 2020).



Impact Assessment Report Template

The AI System's Name

current phase of the system's lifecycle

A Section 1 **Information on the System's Use and Teams**

1.1 **System's Use.** Description of the system's intended use:
Purpose. Objective intended to be accomplished through the system's use.
Capability. Technical capability that enables the realization of the purpose.
Domain. The area or sector selected for the system's use.
AI User. Entities or individuals in charge of deploying and managing the system.
AI Subject. Individual, group or organization impacted by the system's use.

1.2 **System Components.** Description of the system's underlying components, including machine learning models and third-party technologies, and monitoring of the system's use.

1.3 **System Data.** Description of input data, training data, validation data, and testing data.

1.4 **System Evaluation.** Description of the system's performance, accuracy, reliability, and limitations, including the reasonably foreseeable misuse.
Evaluation at development stage.
Evaluation at deployment tage.
Evaluation at use stage.
Limitations.

1.5 **Teams.** Description of the diversity and ethica development, deployment, or use.

B Section 2 **Risks**

Summary statement. Outlining the main risks and environment that can result from the AI s

2.1 **Capability Risks.** Outlining the main risks ori and the processes, incuding **System Evaluati** and components are created.

Main Risk 1.

Main Risk 2.

2.2 **Human Interaction Risks.**

2.3 **Systemic Impact Risks.**

C Section 3 **Mitigation Strategies**

Summary statement. Outlining the main mitigation strategies for the risks associated with the system's use.

3.1 **Mitigations of the Capability Risks.**
3.2 **Mitigations of the Human Interaction Risks.**
3.3 **Mitigations of the Systemic Impact Risks.**

D Section 4 **Benefits**

Summary statement. Outlining the main benefits of the system's use.

4.1 **Capability Benefits.**
4.2 **Human Interaction Benefits.**
4.3 **Systemic Impact Benefits.**

E Section 5 **Governance**

Reporting Risks

Helpline.
Reporting portal.
Mail.
Address.

Registered Office

Name of the company.
Address.

Compliance Certificates

Last report update: 29 Feb 2024

AI Fairness Checklist, Microsoft
https://dl.acm.org/doi/10.1145/3313831.3376445

AI Impact Assessment Report Template, Nokia Bell Labs
https://dl.acm.org/doi/10.5555/3716662.3716678

AI Fairness Checklist – Drafts – V1

What did they do to create V1?

1) Two of the authors and other stakeholders in the company **designed an initial AI fairness checklist based on existing checklists and previous literature research**

2) **Run individual semi-structured interviews** (14 participants) to understand fairness practices and checklist requirements:

- Fairness efforts were ad hoc and driven by passionate individuals.
- Organisational culture prioritised shipping fast.
- Junior advocates faced costs for raising concerns.
- Senior staff gave ethical advice they were insulated from the consequences of.

AI Fairness Checklist – Drafts – V1

What did they do to create V1?

1) Two of the authors and other stakeholders in the company **designed an initial AI fairness checklist based on existing checklists and previous literature research**

2) **Run individual semi-structured interviews** (14 participants) to understand fairness practices and checklist requirements:

- Fairness efforts were ad hoc and driven by passionate individuals.
- Organisational culture prioritised shipping fast.
- Junior advocates faced costs for raising concerns.
- Senior staff gave ethical advice they were insulated from the consequences of.

Result →

1) Envisioning AI systems
6-14 items, e.g.
- ❑ Envision system purpose and scrutinize for potential fairness issues
- ❑ …

2) Defining AI systems
6-14 items, e.g.
- ❑ Define fairness criteria
- ❑ …

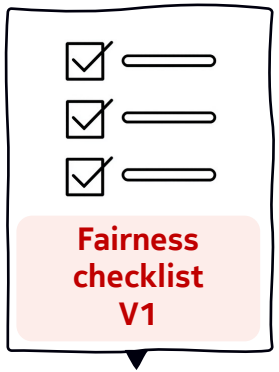
3) Prototyping AI systems
4) Building AI systems
5) Launching AI systems
6) Evolving AI systems

V1

AI Fairness Checklist – Drafts – from V1 to V2

AI Fairness Checklist – Drafts – from V1 to V2

AI Fairness Checklist – Drafts – from V1 to V2



Draft

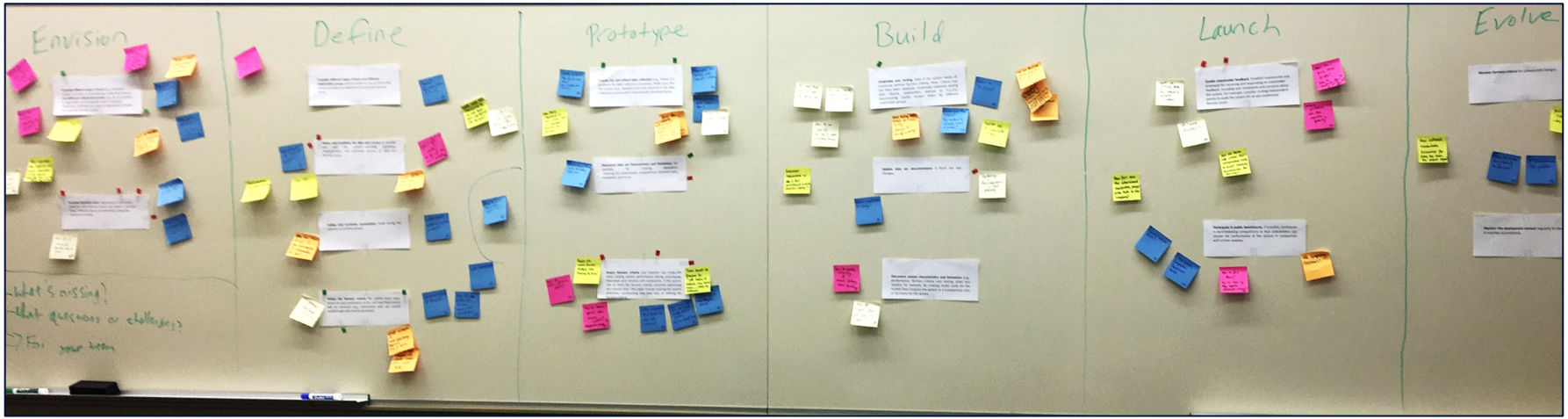
2 **8 sessions**

3

19 participants

- Practitioners from 12 technology companies working on 37 separate products and services
- Roles included product managers, data scientists, designers, software engineers, researchers, consultants, content editors

AI Fairness Checklist – Drafts – from V1 to V2



8 sessions

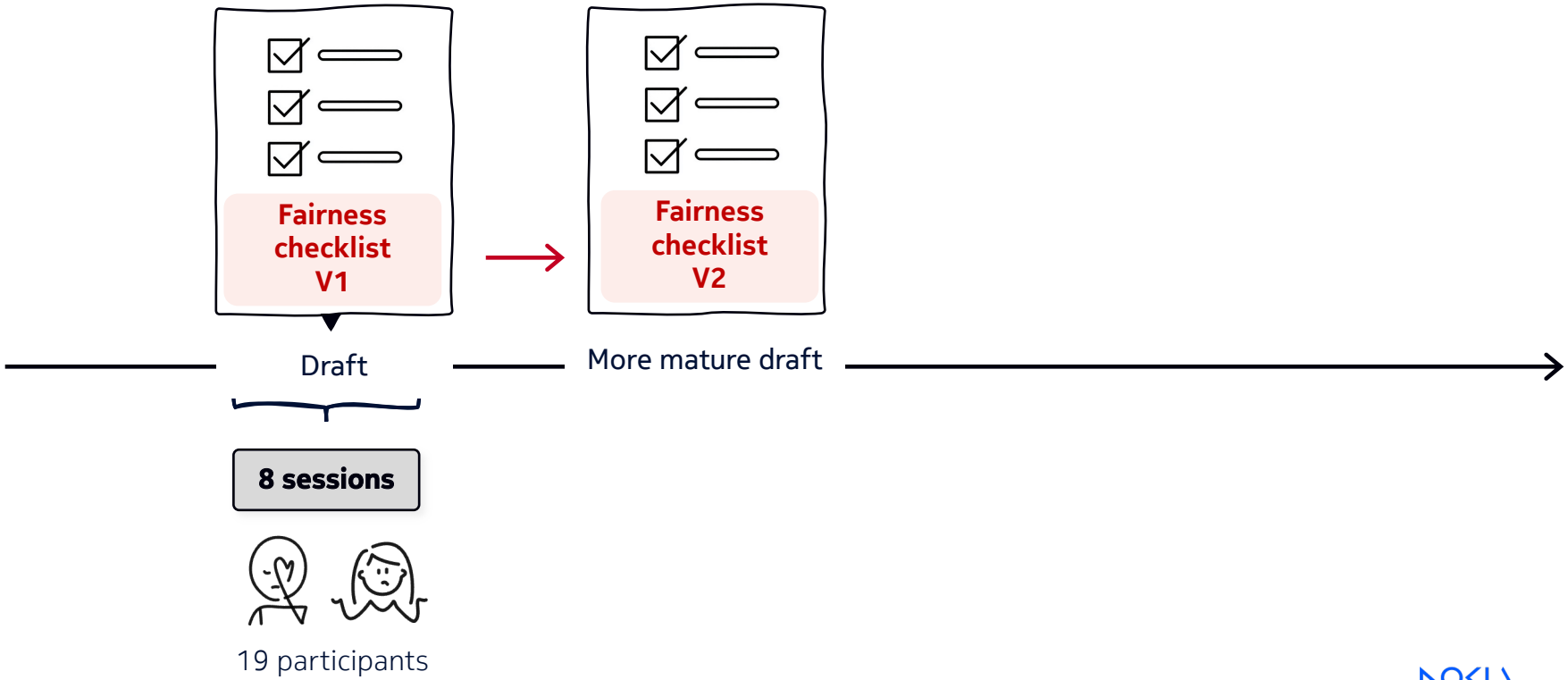
19 participants

Working in groups:

- Item-level feedback using post-it notes and colored dots
- Generating positive and negative checklist implementation scenarios

NOKIA BELL LABS

AI Fairness Checklist – Drafts – from V2 to V3

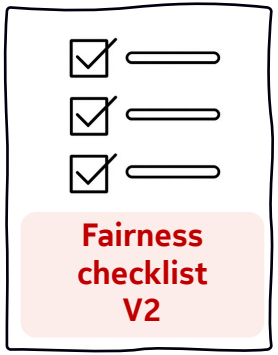


AI Fairness Checklist – Drafts – from V2 to V3

Draft

8 sessions

19 participants



More mature draft

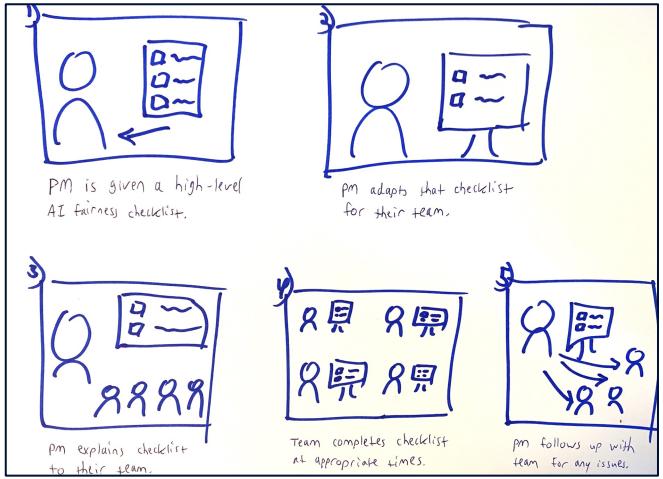
19 sessions

21 participants

Working (mostly) individually:

- Item-level feedback using post-it notes and colored dots
- Giving quick feedback on positive and negative checklist implementation scenarios
- Illustrating their **ideal** implementation scenario

AI Fairness Checklist – Drafts – from V2 to V3



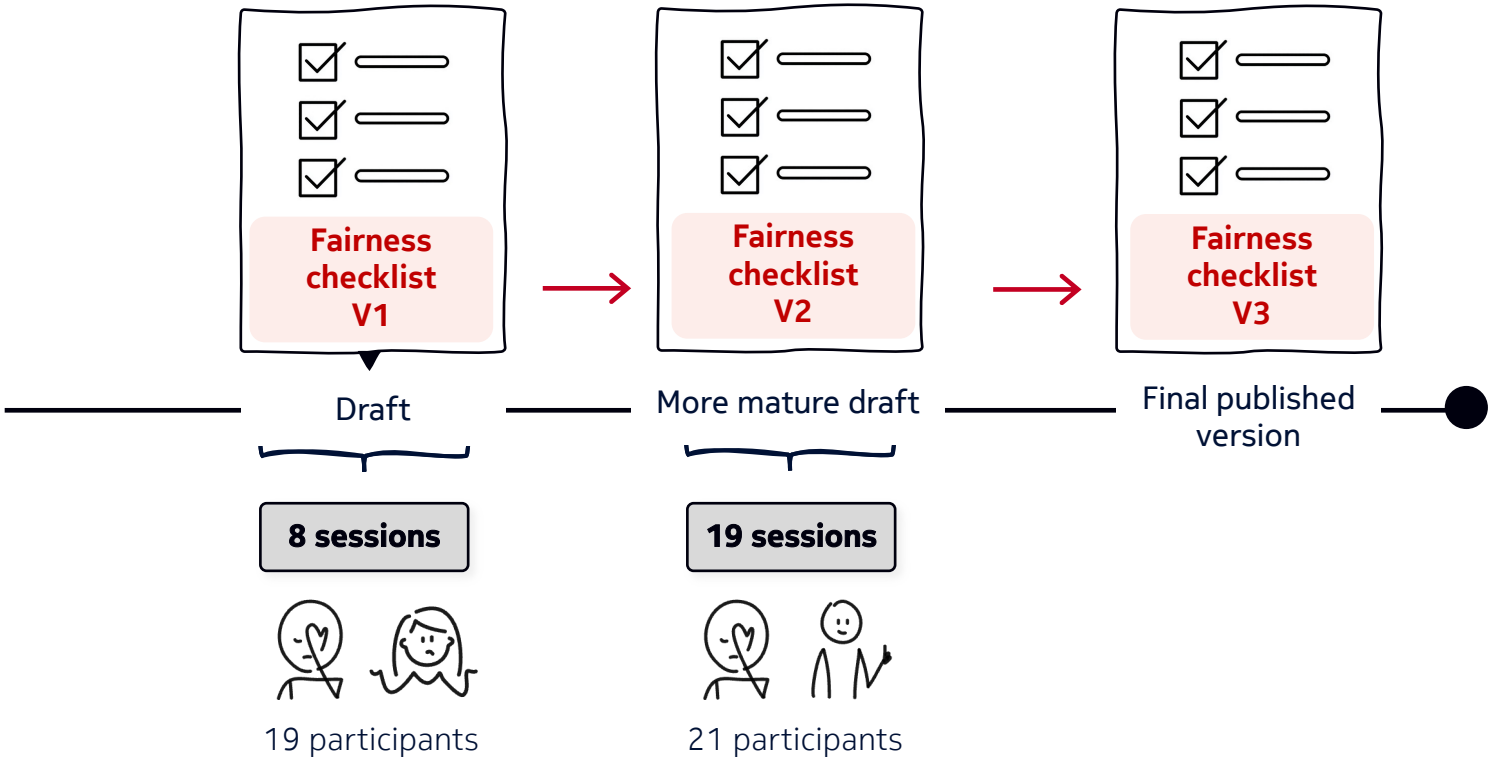
19 sessions

21 participants

Working (mostly) individually:

- Item-level feedback using post-it notes and colored dots
- Giving quick feedback on positive and negative checklist implementation scenarios
- Illustrating their **ideal** implementation scenario

AI Fairness Checklist – Drafts – from V1 to V2 to V3 (final version)



AI Impact Assessment Report Template

STEP 1
SEMI-STRUCTURED INTERVIEWS WITH AI COMPLIANCE EXPERTS

30 min

PARTICIPANTS
- N=2 AI Compliance Experts from a large tech company

PROCEDURE
1. Annotating excerpts from the EU AI Act, the NIST's AI Risk Management Framework and the ISO 42001 AI Management System
2. Designing the initial prototype of the report template

V1 → E1-E2

OUTCOME
Initial prototype based on two design requirements:

- R1 Complete
- R2 Broad

STEP 2
ITERATIVE CO-DESIGN OF THE REPORT TEMPLATE WITH BOTH AI PRACTITIONERS AND AI COMPLIANCE EXPERTS

30 min

PARTICIPANTS
- N=14 AI Practitioners from a large tech company
- N=6 AI Compliance Experts from a large tech company

PROCEDURE
1. Reviewing and annotating the initial prototype throughout four iterations

V1 → P1-P4 → V2 → P5-P8, E3-E4 → V3 → P9-P11, E5-E6 → V4 → P12-P14, E7-E8 → V5

OUTCOME
Final template based on two additional design requirements:

- R1 Complete
- R2 Broad
- R3 Adaptable to uses
- R4 Adaptable to different roles

STEP 3
POPULATING THE REPORT TEMPLATE WITH BOTH AI PRACTITIONERS AND AI COMPLIANCE EXPERTS

PARTICIPANTS
- N=2 AI Practitioners
- N=2 AI Compliance Experts

PROCEDURE
1. Populating the template with AI Practitioners responses
2. Reviewing the populated template for legislative and factual inconsistencies with AI Compliance Experts

V5 → PA-PB → V5 → E1-E2 → V5

OUTCOME
Filled-in template for a meeting companion: an AI-based system aimed at monitoring employee behavior during company meetings to improve the meeting experience.

STEP 4
EVALUATION OF THE REPORT TEMPLATE WITH BOTH AI PRACTITIONERS AND AI COMPLIANCE EXPERTS

PARTICIPANTS
- N=8 AI Practitioners from a large tech company
- N=5 AI Compliance Experts from a large tech company, industry, and academia

PROCEDURE
1. Rating the template against four design requirements and the baseline
2. Collecting preferences and potential uses of the report template

V5 vs B → P15-P22, E9-E13

OUTCOME
Average ratings of the report template:

- R1 *3.87/5*
- R2 *4.10/5*
- R3 *4.12/5*
- R4 *4.05/5*

NOKIA BELL LABS

AI Impact Assessment Report Template

STEP 1
SEMI-STRUCTURED INTERVIEWS WITH AI COMPLIANCE EXPERTS

30 min

PARTICIPANTS

- N=2 AI Compliance Experts from a large tech company

PROCEDURE

1. Annotating excerpts from the EU AI Act, the NIST's AI Risk Management Framework and the ISO 42001 AI Management System
2. Designing the initial prototype of the report template

V1 → E1-E2

OUTCOME

Initial prototype based on two design requirements:

- R1 Complete
- R2 Broad

STEP 2
ITERATIVE CO-DESIGN OF THE REPORT TEMPLATE WITH BOTH AI PRACTITIONERS AND AI COMPLIANCE EXPERTS

30 min

PARTICIPANTS

- N=14 AI Practitioners from a large tech company
- N=6 AI Compliance Experts from a large tech company

PROCEDURE

1. Reviewing and annotating the initial prototype throughout four iterations

V1 → P1-P4 → V2 → P5-P8, E3-E4 → V3 → P9-P11, E5-E6 → V4 → P12-P14, E7-E8 → V5

OUTCOME

Final template based on two additional design requirements:

- R1 Complete
- R2 Broad
- R3 Adaptable to uses
- R4 Adaptable to different roles

STEP 3
POPULATING THE REPORT TEMPLATE WITH BOTH AI PRACTITIONERS AND AI COMPLIANCE EXPERTS

PARTICIPANTS

- N=2 AI Practitioners
- N=2 AI Compliance Experts

PROCEDURE

1. Populating the template with AI Practitioners responses
2. Reviewing the populated template for legislative and factual inconsistencies with AI Compliance Experts

V5 → V5 → V5 → PA-PB → E1-E2

OUTCOME

Filled-in template for a meeting companion: an AI-based system aimed at monitoring employee behavior during company meetings to improve the meeting experience.

STEP 4
EVALUATION OF THE REPORT TEMPLATE WITH BOTH AI PRACTITIONERS AND AI COMPLIANCE EXPERTS

PARTICIPANTS

- N=8 AI Practitioners from a large tech company
- N=5 AI Compliance Experts from a large tech company, industry, and academia

PROCEDURE

1. Rating the template against four design requirements and the baseline
2. Collecting preferences and potential uses of the report template

V5 vs B → P15-P22, E9-E13

OUTCOME

Average ratings of the report template:

- R1 *3.87/5*
- R2 *4.10/5*
- R3 *4.12/5*
- R4 *4.05/5*

NOKIA BELL LABS

AI Fairness Checklist – Drafts – V1

What did we do to create V1?

1) Reviewed five existing AI impact assessment templates

2) Annotated excerpts from the EU AI Act, NIST AI RMF, and ISO 42001

3) Interviewed 2 compliance experts to:
   - Surface two design requirements for the template: R1 Complete; R2 Broad
   - Organise excerpts into high-level topics

4) Structured topics thematically and hierarchically into a template

AI Impact Assessment Report Template – Drafts – V1

Impact Assessment Report

The AI System's Name

system phase

Section 1 **Information on the System's Use and Teams**

1.1 **System's Use.** Description of the intended purpose for which the system will be used, its geographic and temporal extent, categories of natural persons and groups likely to be affected by the use and any natural or legal person who has authority over thhe use.

1.2 (A) **System Components.** Description of underlying components, including machine learning models and third-party technologies, their performance characteristics and monitoring of the system's use.

1.3 **System Data.** Description of input data, training data, validation data, and testing data.

1.4 **Teams.** Description of the diversity and ethical skills of the teams overseeing the system's development, deployment, or use.

(+) ***Regulations.*** *Identify laws applicable to system's use.*

Section 2 **Risks**

Summary statement. Outlining the main risks of implementing the system, which may undermine safety, the rule of law, fundamental rights, health, and the environment.

Risks associated with the system's use grouped into specific themes, such as Privacy, Fairness, Democracy.

(B) (+) ***Likelihood and Magnitude of Harms.*** *Assess and document the likelihood and magnitude of each system's use, based on historical applications in similar contexts, public incident reports, stakeholder feedback, and other relevant data.*

Section 3 **Mitigation Strategies**

Summary statement. Outlining the main mitigation strategies for the risks associated with the system's use.

Mitigation strategies corresponding to specific risk themes, such as Privacy, Fairness, Democracy.

(+)

Section 4 **Benefits**

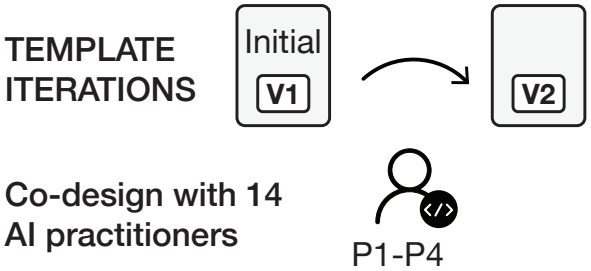
Summary statement. Outlining the main benefits of the system's use covering direct and indirect advantages for users, organizations, and society.

Benefits grouped into specific themes, such as Privacy, Fairness, Democracy

(+)

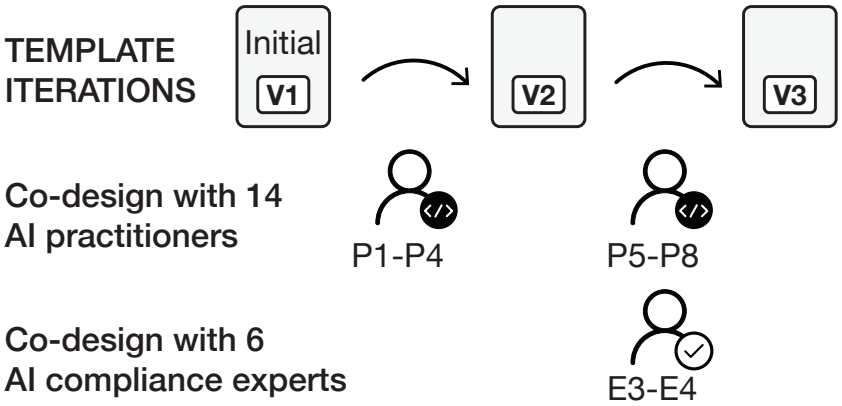
NOKIA BELL LABS

AI Impact Assessment Report Template – Drafts – from V2 to V5



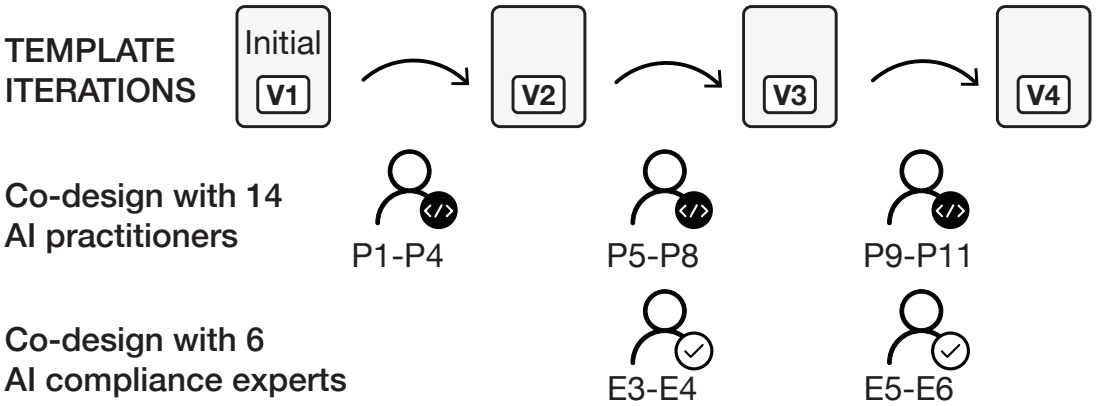
- Reviewing and annotating the current draft individually
- Surfacing other design requirements for the template: R3 Adaptable to uses

AI Impact Assessment Report Template – Drafts – from V2 to V5



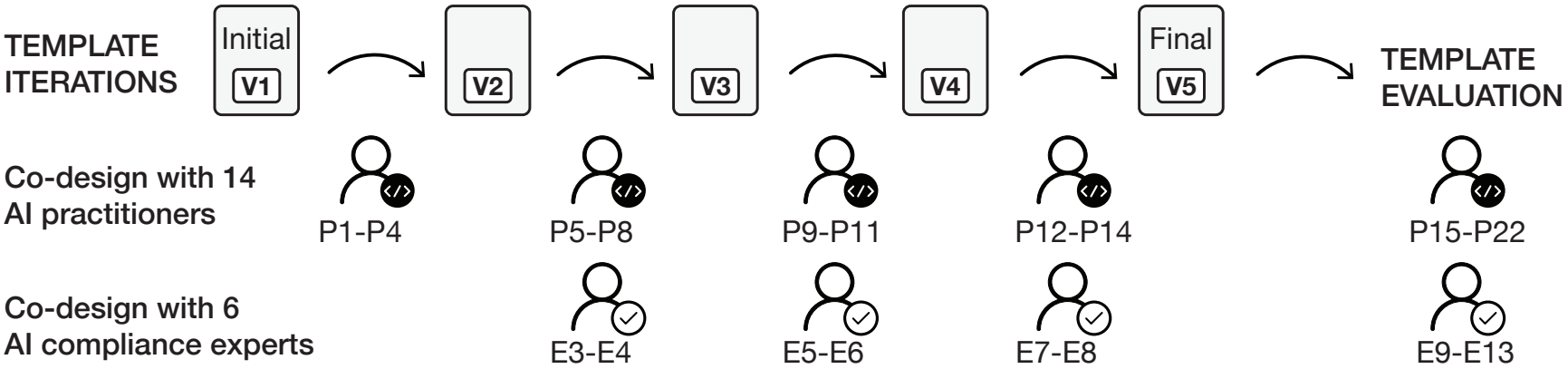
- Reviewing and annotating the current draft individually
- Surfacing other design requirements for the template: R3 Adaptable to uses; R4 Adaptable to different roles

AI Impact Assessment Report Template – Drafts – from V2 to V5



- Reviewing and annotating the current draft individually
- Surfacing other design requirements for the template: R3 Adaptable to uses; R4 Adaptable to different roles

AI Impact Assessment Report Template – Drafts – from V2 to V5



- Reviewing and annotating the current draft individually
- Surfacing other design requirements for the template

→ Sessions repeated until we reached design saturation - no further template refinements needed

Part 4

Iterating session outputs: what real change looks like?

NOKIA BELL LABS

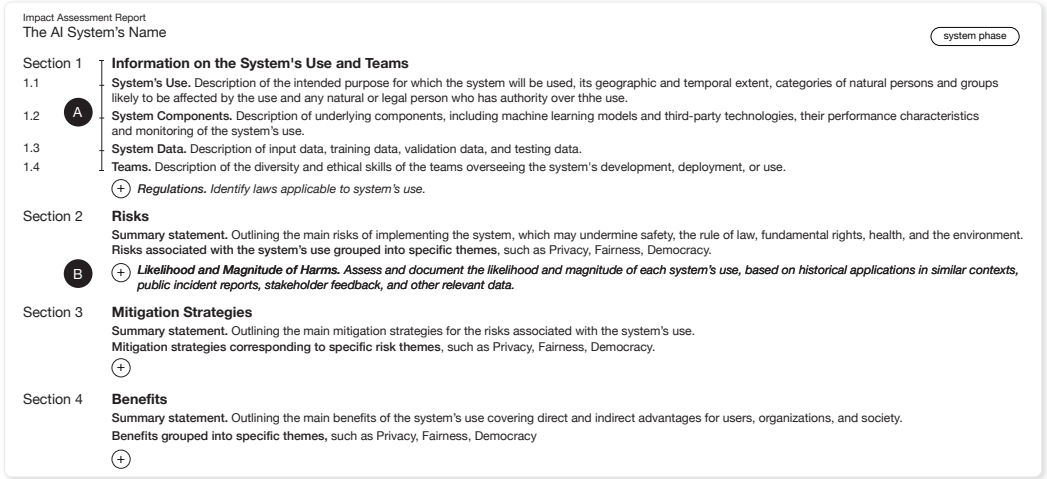
Types of iterations

Changes to content
- Removing items participants found redundant, unworkable, or out of scope
- Adding entirely new checklist sections surfaced by a stakeholder group you had not anticipated
- Adding scaffolding to help users populate the checklist (e.g., helping questions)

Changes to language
- Rewriting binary yes/no items as prompts for conversation
- Replacing abstract words with vocabulary practitioners actually use
- Simplifying terms to make items accessible to non-expert roles

Changes to structure and layout
- Splitting a single section into multiple subsections
- Reorganising items under a new grouping logic
- Adding summary statements at the top of each section
- Introducing rating or scoring placeholders

AI Impact Assessment Report Template



Impact Assessment Report
The AI System's Name
system phase

Section 1 **Information on the System's Use and Teams**
1.1 **System's Use.** Description of the intended purpose for which the system will be used, its geographic and temporal extent, categories of natural persons and groups likely to be affected by the use and any natural or legal person who has authority over thhe use.
1.2 A **System Components.** Description of underlying components, including machine learning models and third-party technologies, their performance characteristics and monitoring of the system's use.
1.3 **System Data.** Description of input data, training data, validation data, and testing data.
1.4 **Teams.** Description of the diversity and ethical skills of the teams overseeing the system's development, deployment, or use.
⊕ ***Regulations.*** *Identify laws applicable to system's use.*

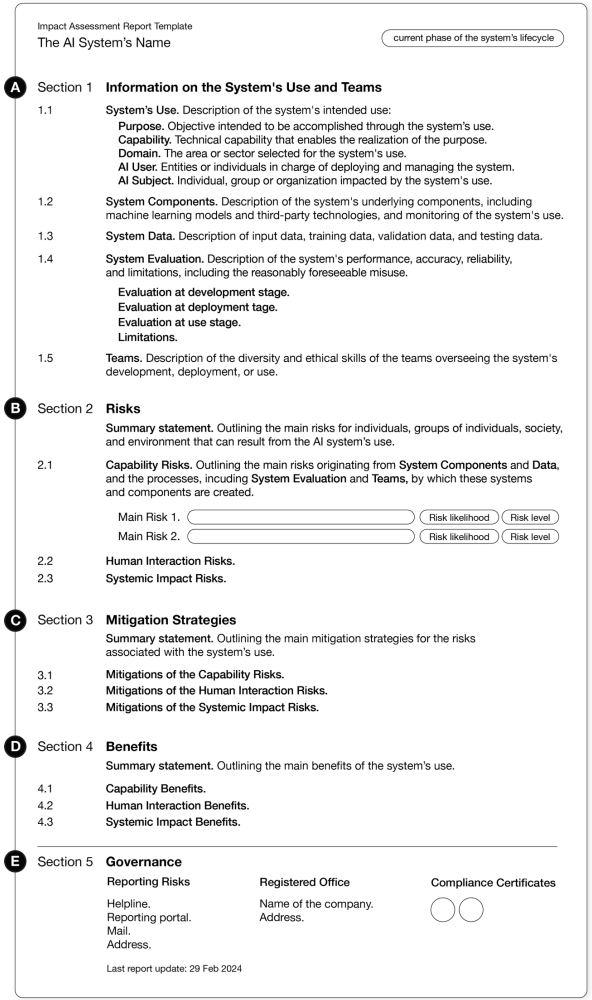
Section 2 **Risks**
Summary statement. Outlining the main risks of implementing the system, which may undermine safety, the rule of law, fundamental rights, health, and the environment.
Risks associated with the system's use grouped into specific themes, such as Privacy, Fairness, Democracy.
B ⊕ ***Likelihood and Magnitude of Harms.*** *Assess and document the likelihood and magnitude of each system's use, based on historical applications in similar contexts, public incident reports, stakeholder feedback, and other relevant data.*

Section 3 **Mitigation Strategies**
Summary statement. Outlining the main mitigation strategies for the risks associated with the system's use.
Mitigation strategies corresponding to specific risk themes, such as Privacy, Fairness, Democracy.
⊕

Section 4 **Benefits**
Summary statement. Outlining the main benefits of the system's use covering direct and indirect advantages for users, organizations, and society.
Benefits grouped into specific themes, such as Privacy, Fairness, Democracy
⊕

V1

V5 →



Impact Assessment Report Template
The AI System's Name
current phase of the system's lifecycle

A Section 1 **Information on the System's Use and Teams**
1.1 **System's Use.** Description of the system's intended use:
Purpose. Objective intended to be accomplished through the system's use.
Capability. Technical capability that enables the realization of the purpose.
Domain. The area or sector selected for the system's use.
AI User. Entities or individuals in charge of deploying and managing the system.
AI Subject. Individual, group or organization impacted by the system's use.
1.2 **System Components.** Description of the system's underlying components, including machine learning models and third-party technologies, and monitoring of the system's use.
1.3 **System Data.** Description of input data, training data, validation data, and testing data.
1.4 **System Evaluation.** Description of the system's performance, accuracy, reliability, and limitations, including the reasonably foreseeable misuse.
Evaluation at development stage.
Evaluation at deployment tage.
Evaluation at use stage.
Limitations.
1.5 **Teams.** Description of the diversity and ethical skills of the teams overseeing the system's development, deployment, or use.

B Section 2 **Risks**
Summary statement. Outlining the main risks for individuals, groups of individuals, society, and environment that can result from the AI system's use.
2.1 **Capability Risks.** Outlining the main risks originating from **System Components** and **Data,** and the processes, incuding **System Evaluation** and **Teams,** by which these systems and components are created.
Main Risk 1. Risk likelihood Risk level
Main Risk 2. Risk likelihood Risk level
2.2 **Human Interaction Risks.**
2.3 **Systemic Impact Risks.**

C Section 3 **Mitigation Strategies**
Summary statement. Outlining the main mitigation strategies for the risks associated with the system's use.
3.1 **Mitigations of the Capability Risks.**
3.2 **Mitigations of the Human Interaction Risks.**
3.3 **Mitigations of the Systemic Impact Risks.**

D Section 4 **Benefits**
Summary statement. Outlining the main benefits of the system's use.
4.1 **Capability Benefits.**
4.2 **Human Interaction Benefits.**
4.3 **Systemic Impact Benefits.**

E Section 5 **Governance**

Reporting Risks	Registered Office	Compliance Certificates
Helpline. Reporting portal. Mail. Address.	Name of the company. Address.	◯ ◯

Last report update: 29 Feb 2024

AI Impact Assessment Report Template

V1

Section 1	**Information on the System's Use and Teams**
1.1	**System's Use.** Description of the intended purpose for which the system will be used, its geographic and temporal extent, categories of natural persons and groups likely to be affected by the use and any natural or legal person who has authority over thhe use.

V5

Section 1	**Information on the System's Use and Teams**
1.1	**System's Use.** Description of the system's intended use: **Purpose.** Objective intended to be accomplished through the system's use. **Capability.** Technical capability that enables the realization of the purpose. **Domain.** The area or sector selected for the system's use. **AI User.** Entities or individuals in charge of deploying and managing the system. **AI Subject.** Individual, group or organization impacted by the system's use.

AI Impact Assessment Report Template

V1

Section 2	**Risks** **Summary statement.** Outlining the main risks of implementing the system, which may undermine safety, the rule of law, fundamental rights, health, and the environment. **Risks associated with the system's use grouped into specific themes**, such as Privacy, Fairness, Democracy.

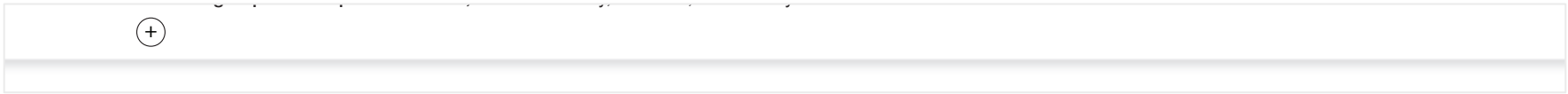
V5

Section 2	**Risks**
	Summary statement. Outlining the main risks for individuals, groups of individuals, society, and environment that can result from the AI system's use.
2.1	**Capability Risks.** Outlining the main risks originating from **System Components** and **Data**, and the processes, incuding **System Evaluation** and **Teams,** by which these systems and components are created.
	Main Risk 1. ( ) Risk likelihood Risk level
	Main Risk 2. ( ) Risk likelihood Risk level
2.2	**Human Interaction Risks.**
2.3	**Systemic Impact Risks.**

NOKIA BELL LABS

AI Impact Assessment Report Template

V1



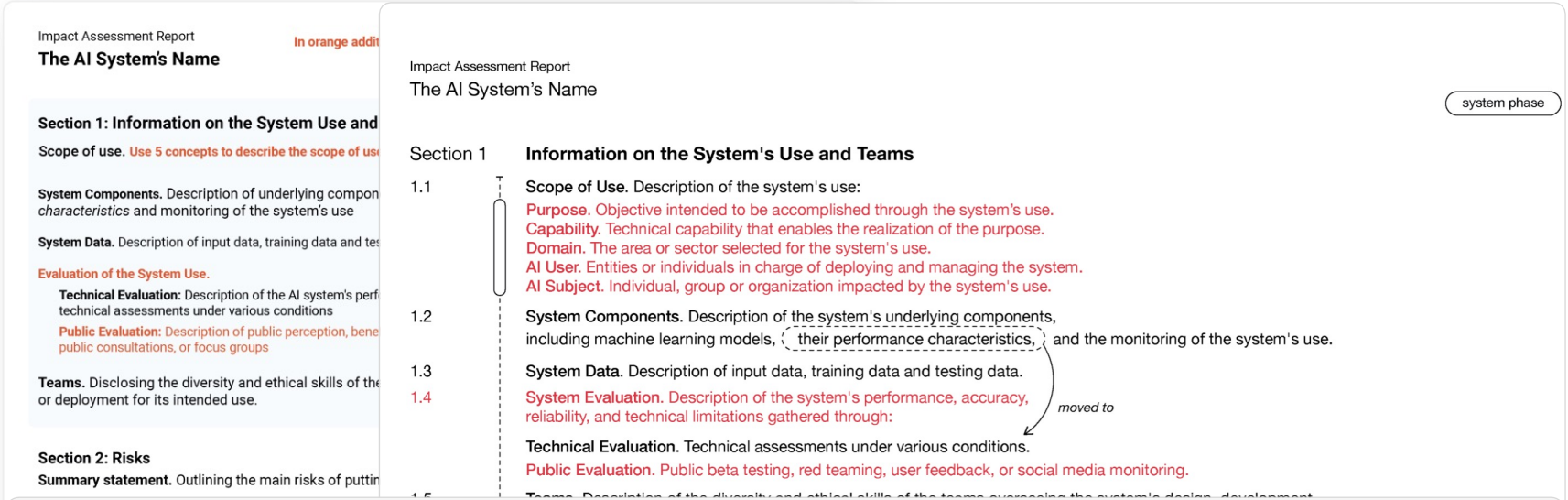
V5

Section 5 **Governance**

Reporting Risks	Registered Office	Compliance Certificates
Helpline. Reporting portal. Mail. Address.	Name of the company. Address.	

Last report update: 29 Feb 2024

How iterations look behind the scenes ☺



3. Develop tools to populate the content with AI-based Tools

Recommendation:
Develop a pre-processing system or survey tool that helps developers or assessors determine which specific regulations and compliance standards are applicable to their AI system, based on its characteristics and use case.

It's very much about discovering risks and I strongly believe that we should use automated tools and Gen AI to aid in that process to prompt with the right kind of responses

P1

Edyta Bogucka (Nokia)

It would be very nice if there is a tool that we write down the risks in plain English and then the system automatically links to the articles or at least suggests some of the articles that might be relevant to our system. Then we can check and say, "OK, yeah, this, this and this makes sense for our case".

Edyta Bogucka (Nokia)

Documenting iterations

- For every significant change between V_n and V_{n+1}, write 1-2 sentences explaining what participant feedback prompted it.
- If you kept an item unchanged despite someone suggesting you remove it, explain why.
- This reasoning is the evidence of co-design, not just the existence of two versions!
- Documentation test: if you handed your V_n and V_{n+1}, to someone who had not attended your session, could they reconstruct what participants said?
  - If yes, your iteration is visible.
  - If not, add more rationale.

(B) TEMPLATE ITERATIONS

V1 The primary concern with the first iteration with AI practitioners was the lack of evaluation details when the system is deployed in different contexts. P1 mentioned that *'more details are needed about system's use in actual deployment and what are the risks"*. To resolve this issue, we added a new subsection "System evaluation", which details evaluation outcomes at each stage of the system's lifecycle: development, deployment, and use (Figure 4).

V2 The primary concerns with the second iteration were about the unclear description of the system's intended use and the limitations of this use. Participants stated that the template was either missing key components or its presentation made it hard for them to read. As P04 put it, *"I'm missing description about the users of the system"*.

First, to clarify the system's use, we divided its description into five subsections matching the risk assessment components identified by Golpayegani, Pandit, and Lewis (2023): purpose, capability, domain, user, and subject. Such a division provides all necessary information needed for conducting the risk assessment based on the EU AI Act. Users could specify these components using external dictionaries, such as the Vocabulary of AI Risks (Golpaygani, Pandit, and Lewis 2023), which contains lists of descriptions for each of these concepts sourced directly from the Act.

Second, after the "Evaluation" subsection, we added a sub-section to list system's use limitations. This subsection can cover for example the reasonably foreseeable misuse: the use of an AI system in a way that is not in accordance with its intended use, but which may result from reasonably foreseeable human behaviour or interaction with other systems, including other AI systems.

AI Impact Assessment Report Template

Part 3

Running a co-design session: practical guidance

Participant recruitment (1)

How many?

- 3–6 participants minimum
- At least 2 distinct stakeholder groups
- Small groups (1–3 people) for granular feedback, larger groups (4–8) for consensus and discussion
- Usually larger groups are needed at the beginning of the co-design process

Who?

- People who will use the checklist in practice
- People who will be affected by the decisions the checklist informs
- People with knowledge the rest of the group does not have

Participant recruitment (2)

How to find them?

- Start with whoever you already have access to in your chosen profession
- Ask each person to refer one other → so called snowball sampling
- Prioritise composition over convenience: whose blind spot are you most worried about missing?
- You can also find them online → Reddit forums, LinkedIn leaders, Prolific platform users…

If you want to run group sessions - when to separate groups?

- Mixed seniority: junior workers self-censor on sensitive topics when senior colleagues are present
- Mixed roles with conflicting interests: surface tensions separately before bringing groups together
- When one group's presence would silence another's honest feedback

What to do before the session (1)

Build your V1 checklist ;-)

- Use your scoping review as the evidence base
- Draft 15–20 concrete items — enough to react to, incomplete enough to change
- Do not present V1 as finished — it is a stimulus, not a proposal

Contact participants in advance

- Send a brief description of the session goals
- Share any background material they need to engage meaningfully, e.g., V1 of the checklist
- Collect consent to participate in the study
- Remind them the day before → participants who feel prepared engage more deeply ☺

What to do before the session (2)

Prepare your session guide

- Write the activities you will use, in order, with timing (!)
- Prepare contingency questions in case an activity runs short or participants disengage
- Assign roles: one facilitator, one notetaker → never the same person

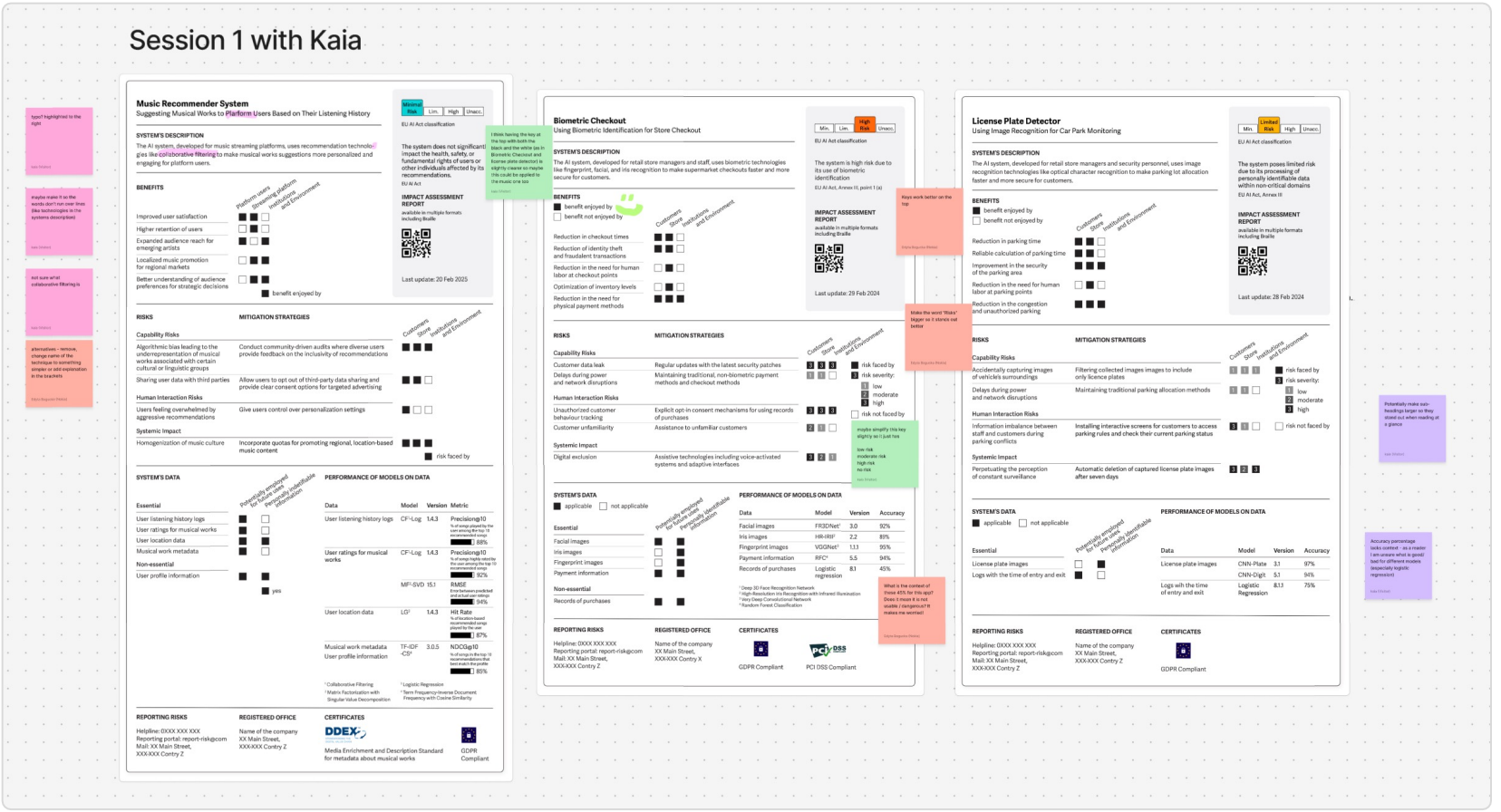
Prepare your materials

- Print or prepare a digital copy of V1 for each participant
- Prepare rating materials
  → physical dot stickers, post-its
  → digital equivalents e.g., in Miro/ Figma board

Brief your team

- Make sure every team member knows the session goals and their specific role
- Run a short pilot to gauge timing and identify confusing activities before the real session

Session 1 with Kaia



What to do during the session (1)

If you have 60min, you should plan for 4 part-session with an introduction, warm-up, main activities block and closing.

1) Introduction (2-3min)

- Introduce the session schedule and rules
- Recap the project and where you are in it
- Confirm consent, start recording, start taking notes!

2) Warm-up (5min)

- A short icebreaking activity to build empathy and trust
- Treat it as a ceremony → a signal that the session has begun
- Example: ask each participant to describe one AI tool they use at work and one thing that frustrates them about it

What to do during the session (2)

3) Main activities (45min)

Four types → choose based on what you need from the session:

- **Inspiring** (divergent): open prompts that surface experience and broaden the problem space.
  Example: "Tell us about a decision in your work where you wished you had better guidance."
- **Framing:** explore a topic deeply, identify clusters and patterns.
  Example: silent rating of V1 items, then grouping feedback into themes together.
- **Implementing:** participants physically interact with an editable draft.
  Example: annotating your V1 checklist directly — crossing out, rewriting, adding sticky notes.
- **Closing** (convergent): select between options and reach consensus.
  Example: dot voting on which missing items should be added to V2.

4) Closing (5 min)

- Summarise what you heard and check you understood correctly
- Remind them to keep session content confidential if applicable
- Thank participants

What to do after the session (1)

Debrief as a team

- Convene within 24 hours while impressions are fresh
- Record first impressions before consulting notes or recordings

Analyse your material

- Review notes and recording together
- Code feedback into categories: wording issues, missing items, priority disagreements, feasibility concerns, etc..
- Flag items where stakeholder groups disagreed with each other - these can become your most important findings

What to do after the session (2)

Make V_{n+1} of your checklist

- Make changes that are directly traceable to participant feedback
- For every significant change, write one sentence explaining what prompted it
- For every item you kept unchanged despite feedback, write one sentence explaining why
- Do not make changes you cannot trace back to something a participant said

Apply the visibility test

- Hand your V1 and V2 to a teammate who did not attend the session
- Ask them: can you reconstruct what participants said from these two versions alone?

Prepare your appendix

- Session guide as used - not as planned; the guides will differ as you move through the iterations
- Anonymised notes from the session
- V_n of the checklist as participants saw it
- V_{n+1} of the checklist with changes explained in the report text and/or annotated on the template

Part 5

Avoiding common co-design pitfalls

NOKIA BELL LABS

Five pitfalls and their fixes

Pitfall 1: Treating co-design as validation
You present a nearly finished checklist and note that participants mostly agreed. This is not co-design.

Fix: present V1 as a draft you expect to change and mean it. If V2 looks nearly identical to V1, something went wrong in the session.

Pitfall 2: Only one stakeholder group
A checklist built only with practitioners misses organisational and compliance constraints.
Built only with managers, it misses what is workable at ground level.

Fix: recruit deliberately across groups.

Pitfall 3: Binary yes/no items that produce compliance theatre
Microsoft's study participants identified this explicitly. Items framed as checkboxes invite people to check boxes, not to think.

Fix: phrase items as prompts for scrutiny and conversation. "Have you considered X?" invites more genuine engagement than "Have you done X? Yes / No."

Five pitfalls and their fixes

Pitfall 4: Checklist items themselves are poorly written

Fix 1: One item, one question — if you need the word "and" in an item, split it
Fix 2: Name the actor and use active voice — "the team should assess" not "it should be assessed"
Fix 3: Pilot one item with someone outside your team before the session — if they hesitate, rewrite it
Fix 4: Ask one participant in your warm-up to walk you through how they would approach this decision in practice — use that sequence for ordering

Pitfall 5: Checklist is too profession-specific

Your brief is explicit — the checklist must be general and transferable.

Fix: after your session, read each item aloud as if you were working in a completely different profession. If it still makes sense, it is general enough. If not, it belongs in the worked use case, not the checklist.


NOKIA
BELL
LABS