

TABLE I  
AN OVERVIEW OF THE DIFFERENT PILOTS OF THE GAME AND THEIR RESULTS

Game elements and their numbers (for each session)	Change(s)	Game version	Participants	No. of participants	The way(s) of playing
<ul style="list-style-type: none"> <li>• Project Card (1)</li> <li>• Stakeholder Cards (3)</li> <li>• Ethical Value list (49)</li> <li>• Ethical Concern Cards (10)</li> <li>• Event Cards (4)</li> <li>• Templates (including 3 “Decision Preparation Templates” and 1 “Decision Taking Template”)</li> </ul>	-	V0	-	-	-
<ul style="list-style-type: none"> <li>• Project Card (1)</li> <li>• Stakeholder Cards (3)</li> <li>• Ethical Value Cards (9)</li> <li>• Ethical Concern Cards (10 + 2 empty ones)</li> <li>• Event Cards (4)</li> <li>• Templates (including 3 “Decision Preparation Templates” and 1 “Decision Taking Template”)</li> </ul>	<ul style="list-style-type: none"> <li>• Changing the presentation way of ethical values from a list (including 49 values) to 9 Ethical Value Cards to reduce the game complexity</li> <li>• Adding 2 empty Ethical Concern Cards to let players express their own ethical concerns wrt the project.</li> </ul>	V1	VU (S2 group)	2	Online
<ul style="list-style-type: none"> <li>• Project card (1)</li> <li>• Stakeholder cards (4)</li> <li>• Ethical value cards (5)</li> <li>• Concern cards (8)</li> <li>• Wild cards (2)</li> <li>• Event cards (2)</li> <li>• Templates (including 4 “Decision Preparation Templates” and 1 “Decision Taking Template”)</li> </ul>	<ul style="list-style-type: none"> <li>• Designing the Stakeholder Cards as personas to make the stakeholder categories more concrete, make players’ roles more clear, and help them best suit their roles’ viewpoint(s).</li> <li>• Separating the stakeholder category of “system development organization” into two concrete roles, i.e., product managers and sponsor. It was suggested due to the different interests and ethical values of each role wrt the project.</li> <li>• Reducing the number of Ethical Value Cards and keeping the most relevant ones in the project in order to make the game simple and applicable.</li> <li>• Reducing the number of Ethical Concern Cards and Event Cards due to time limitations, and subsequently decreasing the number of game rounds from four (with three players) to two (with four players).</li> <li>• Allowing players to propose their own options for resolving ethical concerns (on the Ethical Concern Cards) and specify the options’ effects on the relevant values. Indeed, the idea of having a “option hint” to ease proposing options by players instead of having predetermined ones with fixed effects.</li> <li>• Adding 2 Wild cards to the stack of Ethical Concern Cards to provide more flexibility for players in expressing their ethical concerns.</li> </ul>	V2	TU/e (BE cluster)	6	In-person
<ul style="list-style-type: none"> <li>• Project card (1)</li> <li>• Stakeholder cards (5)</li> <li>• Ethical value cards (5)</li> <li>• Concern cards (8)</li> <li>• Wild cards (2)</li> <li>• Event cards (2)</li> <li>• Templates (including 4 “Decision Preparation Templates” and 1 “Decision Taking Template”)</li> </ul>	<ul style="list-style-type: none"> <li>• Considering two cards for the stakeholder category of indirect stakeholders. Indeed, having two options for players who are responsible for this role and letting them choose their specific role based on their interests.</li> <li>• Clarifying the explanation of different stakeholder cards to help players better understand their role.</li> </ul>	V3	VU (S2 group)	11	Online and In-person