## Tables

Table 1: List of surveys of the GEAR cycle 2

| Survey | Data collection <br> platform | Respondents (\% of total <br> participants) |
| :---: | :---: | :---: |
| Evaluate registration Form | Google Form | $38(100 \%)$ |
| Evaluate weekly 1 | CoSo | $26(68 \%)$ |
| Evaluate weekly 2 | CoSo | $26(68 \%)$ |
| Evaluate weekly 3 | CoSo | $20(53 \%)$ |
| Evaluate weekly 4 | CoSo | $22(58 \%)$ |
| Evaluate Final Form | Google Form | $22(58 \%)$ |

## Methods

## Teaming algorithm

Participants who joined as individuals were assigned to a novel team using the teaming algorithm Edu2Com (Georgara et al., 2020). Edu2Com is an heuristic algorithm that generates team allocation based on a certain strategy, which were in this case, competence, preference and personality of the participants. The participants were asked to fill in a survey answering questions related to the competencies, skills and personality and a preference survey, where they ranked the pitches of all the selected ideas from 1 to 5 , based on how interesting they found the idea. These surveys were needed so that the algorithm could propose possible options for team formations. Eight of the twenty pitches were team pitches, and twelve were individual pitches. A majority favored fourteen of the ideas. The Algorithm proposed six combinations of teams retaining the existing teams and six combinations with a completely new proposal of teams. The team profiling algorithm proposed six alternatives for team formations altering the weightage between competence, personality and preferences. From the six alternatives provided, The final selected team profiling was based on a weightage that had $10 \%$ match of their
competencies, $20 \%$ match of their personalities and $70 \%$ of their preferred choices. This particular alternative was chosen since it gave an ideal combination of teaming up individuals as a team along with the pre-formed teams.

| competence | personality | preferences |
| :---: | :---: | :---: |
| $5 \%$ | $20 \%$ | $75 \%$ |
| $5 \%$ | $35 \%$ | $60 \%$ |
| $5 \%$ | $45 \%$ | $50 \%$ |
| $10 \%$ | $20 \%$ | $70 \%$ |
| $10 \%$ | $40 \%$ | $50 \%$ |
| $20 \%$ | $40 \%$ | $40 \%$ |

Combination proposed by the Teaming Algorithm.

Figures


## Who are we?

At Crowd4SDG, we are using surveys for two purposes: improving your experience with the programme, and exploring how activity. interactions, and diversity of teams impact their success. Thank you for helping us to do so! You can find more about it in this information form.

## To access the survey, please login using your email and select Participants as a team name.



|  | Which task(s) did you perform since the previous block? |
| :---: | :---: |
| How helpful did you find the session on [name of the session]? | [ Brainstorming/ideation |
|  | - Planingtask |
| Did not attend \& did not watch the Zoom recording | Developing protocols/methods |
| - Very unhelpful | - Rexding papers/documents |
| (1) Unhelpful | - Attending meetups with other teams |
| Oeither unhelpful nor helpful | Colluborating with other teams |
| Helpful | $\square$ interpreting results |
|  | (- Preparing other documents/materids to share outside the team |
| Very helpful | - Preparingeraphics/videos |
|  | - Writing/preparing a pitch |
|  | [] Project administration |
| Who did you seek advice from during the previous block? | - Software development |
| Select the persons by name from the list below. You may need to scroll down to see all of them. | - Hardware development |
|  | - Data analpis/modeling/visualization |
|  | (-) Meeting with people affected by the problem you are trying to solve |
| Search the participants | $\square$ Meeting with a ctors of the field of your solution |
|  | - Team Building activities |
|  | $\square$ Documentation of your project |
|  | $\square$ Useot CS project builder |
| Who did you work with since the previous block? | $\square$ Useot CSlogger |
| select collaborators within your team or from other teams. You may need to scroll down to see all of them. | - Useof Decidim |
|  | - Use of Visual Cit |
|  | $\square$ Useot SDG inprogress |

Figure S1: Screenshots of the CoSo interface.


Figure S2: Sankey diagrams of teams current or highest level of study (a) and disciplinary backgrounds (b)


Figure S3: Gender (a) and age (b) distributions across teams.


Figure S4: Communication tools reported to be used by teams to communicate. Number indicates number of answers across participants (total $\mathrm{N}=22$ participants).


Figure S5: Heatmap indicating the number of weeks each activity has been reported by a given team, across 4 weeks. Activities and teams are ranked by row and column sums respectively.


Figure S6: Correlation matrices of the features shown in Fig 7, for evaluations (a) and team features (b). Numbers correspond to $p$-values of the correlations. We grayed out cells with a $p$-value $p>0.1$. We find two groups of evaluations: outcomes (top left) and processes (bottom right). For team features, we find that Slack activity is correlated with the intra-team collaborations measured with CoSo, highlighting that digital traces can capture qualitative insights on team work.

