



# Plan International - Equality Tech

## ORGANISATION

Plan International

## LOCATION

Global

## INNOVATION SPECTRUM

Digital equity

## MATURITY LEVEL

Emerging

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## The organisation

[Plan International](#) works to advance children's rights and equality for girls across 75 countries in Asia Pacific, the Americas, Africa and Europe. Plan focuses on enabling vulnerable and excluded children and young people to learn and thrive across its main areas of work, including inclusive quality education, digital skills and technology. Plan harnesses the potential of digital tools to become more efficient and transparent and reach even more children, seeing technology as a strategic enabler and catalyst for social change, activism and development.

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## The big idea

**Equality Tech** challenges the current lack of diversity among the developers of digital products around the world, by engaging girls as the creators and innovators of technology to advance gender equality and reflect their experiences in all stages from design and development to application.

Plan's concept of 'Equality Tech' is technology that in itself advances equality, generating products which raise awareness of the consequences of bias, and harnessing the power of technology to challenge harmful norms and stereotypes and nudge users towards more inclusive behaviours.

The programme aims to:

- establish the concept of Equality Tech across the technology sector and raise awareness among the general public
- educate the next generation of technology creators, especially girls and young women, on how to translate the idea of Equality Tech into concrete digital products
- influence the technology sector to create products that advance human rights and social equality by engaging girls at every stage of the creation process.

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## The challenge and the power dynamics of the system

The digital world is being shaped in the image of only half of the population and currently does not respond to the needs of the whole of society. Around the world, women and girls are underrepresented in Science, Technology, Engineering and Mathematics (STEM) classes and careers, meaning a lack of diversity among the creators of technology. Many digital products used globally are designed and developed by a relatively homogenous group of people, mostly [men from the global north](#), reflecting the biases of this unrepresentative group and therefore reinforcing existing societal inequalities.

This lack of diversity among the creators of technology is well documented. For example, only [around a quarter](#) of developers in leading tech sector companies are female. A vicious cycle repeats itself as the scarcity of women in the ICT sector means girls and young women are unable to see the industry reflecting and accommodating their perspectives, priorities and needs, and therefore shy away from pursuing ICT careers. This results in gender-biased technology products and content created by men which reinforce existing power structures, reproduce harmful norms and stereotypes, and exacerbate inequalities.

The internet is already rife with gender-based violence, sexist voice assistants (Siri, Alexa, Cortana) and algorithms that discriminate against women and girls. As machine learning and artificial intelligence (AI) systems become more common, they risk reproducing existing power dynamics if they continue to be programmed to learn from this unequal status quo. Gendered norms and discriminatory language have been shown to have a profound impact on the empowerment of girls, their confidence and expectations for the future.

Women and girls around the world also continue to face gender-based barriers that prevent them from accessing digital tools at the same level as boys and men, and in some instances this [gap has even grown wider in recent years](#).<sup>1</sup> In global south countries, women are 25% less likely to be online than men and 200 million fewer women have access to mobile phones. There also remains a significant lack of data specifically on girls' access to the internet and mobile tools.

<sup>1</sup> Setting the agenda, Plan International, 2020, <https://plan-international.org/publications/setting-agenda-girls-platform-action#download-options>

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## Intervening in the power dynamics

Equality Tech challenges these power dynamics by engaging girls and women as active, capable partners in technology design and creation, not just as users or recipients of digital products and content. Rather than assuming what girls want and need from technology, it is essential to collaborate with them to determine what the priorities should be, plus strengthen and develop their use and creation of digital tools.

### Enabling meaningful access through Smart Schools

In Latin America, the stereotype that ‘technology is for boys’ limits how many girls use digital tools and subsequently pursue a career in technology. For example, in Guatemala, the gender gap in internet use is 23%. Resources are also lacking for young school children to learn digital skills in school. To help bridge this gap, Plan International partnered with Samsung Electronics Latin America on an innovative project in seven countries, bringing technology to school children through mobile “smart schools”, including girls both in classes where technology was the focus and could be used as a medium to teach other subjects.

The Smart School programme targets public schools to enhance the students’ learning by teaching them about new technologies and equipment, while making the educational environment more intuitive, interactive and fun. ‘Nomada Smart Schools’, named after the nomadic tribes who carry their households with them, are fully portable and compact enough to fit into a single suitcase. The schools come equipped with a ‘Maloca’ (hut) classroom, as well as a 32-inch monitor, tablet computers, virtual reality headsets, and tables, rugs and cushions designed to encourage children and young people to gather around in a circle and share knowledge. In these classes, girls can learn the skills needed to interact with an increasingly digital world and consider tech careers.

## Using girl-centred tools and growing a learning community

Equality Tech's girl-centred methodology focuses on supporting girl-led collective action for children and young people's digital rights, by engaging girls in discussing how technology is biased and what barriers they face with the technology they can currently access. It includes a toolkit, facilitator's guide and general guidelines to conduct workshops and organise activities that implement the approach. The girl-centred methodology was developed and piloted through workshops with more than 100 girls and young women aged 18-24 from 12 countries in Latin America, Africa, Asia and Europe, to discuss, ideate and create solutions for identified biases in technology. The content created is largely driven by the interests of the girls, who also take charge of facilitating workshops, mentoring and training others and leading advocacy activities, building their confidence and agency in the process.

Equality Tech is growing as a learning community where girls and young women can openly discuss issues relevant to them, and use these insights to find solutions to the problems that affect them. This started with workshops organised in Nepal in April 2021 with the 'Girls Out Loud' group, which helps its members to build their confidence to speak up and inspire each other to challenge the views of family members, friends, teachers and religious leaders. It uses social media platforms to give girls a safe space to openly discuss issues relevant to them. To promote awareness and encourage others to reflect on their roles and lead discussions on issues both within and beyond their communities, Girls Out Loud groups included Equality Tech's methodology in their agenda. They have been developing the digital advocacy skills of other girls and planning 'Girls in ICT' events to keep the momentum growing. Six workshop participants who contextualised and translated the Equality Tech methodology went on to facilitate workshops engaging other girls to discuss technology issues and relevant digital solutions.

"This group has given me an opportunity to share my thoughts and opinions regarding different issues of women and girls and gave me a chance to put forward my opinion as well as learn from posts done by others. We really need such sharing groups where we can speak without fear of judgements and prejudice."

- Manisha, 24 years old, Nepal

The Equality Tech methodology is being refined based on the insights and priorities established by girls in these groups, so it can drive the right change and empower girls to lead these discussions at global, regional and country levels.

#### Advocating for more inclusive policies

As part of the UN Women-led campaign [Generation Equality](#), Plan developed advocacy materials and undertook intergenerational dialogue consultations with 350 girls across 12 countries to understand their inclusion needs. This highlighted both the barriers which girls face to engage in technology and STEM, and solutions such as improved vocational training, technical skills and access to mentoring and scholarship opportunities. The Generation Equality movement subsequently laid out priority actions, such as increasing investment in feminist technology and concerted efforts to double the proportion of women in technology.

Importantly, the partnership with Samsung Electronics Nordic has also included bold advocacy and tech sector commitments, and not just project inputs. Plan and Samsung Electronics Nordic are jointly advocating for the creation of technology that challenges harmful gender norms and stereotypes through the engagement of girls and adolescent girls as innovators of technology.

“ Equality Tech has been momentum for the girls to rise up and realise the importance of how girls should come in and design...technology ”

LIRISHA TULADHAR, CAMPAIGN ADMINISTRATOR,  
PLAN INTERNATIONAL NEPAL AND MODERATOR,  
GIRLS OUT LOUD GROUP

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<https://icscentre.org/resources/innovation-report>

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## Aspects underpinning innovation

Equality Tech uses a novel girl-led approach in the context of technology and project creation, showcasing the process rather than the prototypes and products developed. It explicitly aims to tackle the underlying issue of bias in technology and the root causes of gender inequality - particularly unequal gender power relations, discriminatory social norms and systems, structures, policies, and practices. It ensures that girls and young women play a key role at every phase of the process and have the agency to design digital solutions and facilitate the process for other girls and young women. The approach is experimental with space for continuous learning and has allowed Plan to learn from participants in real time. Women and girls in the programme have shared what elements of the methodology to keep, drop, and iterate, before scaling it and designing further activities.

Product ideas and prototypes proposed by and co-created with girls and young women in workshops using the novel methodology are added to Plan's Equality Tech portfolio. This is accessible for further refinement by tech sector partners and innovators who are strategically integrated in the process to influence the wider tech community to engage girls and young women in creating digital solutions that advance human rights and equality. Some of these ideas and prototypes are already generating interest in the tech sector (see Impact and Influence).

Before the next series of workshops, the methodology will be refined based on the results of an evaluation, incorporating safeguarding and safety, diversity, bias, human-centred design and systems thinking. The evaluation will assess the feasibility, duration, cost and risk factors of scaling and consolidate lessons learned and programme participant feedback. It will look at how to ensure that girls and young women have access to content that builds their digital skills, and how this can in turn facilitate access to employment. The evaluation will consider whether Equality Tech adds value to girls at every interaction, and if it provides a platform for girls to take action and create outputs on their own. A set of key indicators will also be redefined to monitor the advocacy progress of the programme, such as the adoption of new policies, laws, participation platforms and budget provisions favourable to digital girls' rights.



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## Impact and influence

In 2017, Plan and Samsung Electronics Nordic launched the first Equality Tech initiative, [Sheboard](#), a predictive text app which questions the way people talk to and about girls, to raise awareness of the impact of gendered speech and encourage a new mindset around girls and their abilities. The design process engaged girls and young women at every phase: concept and application development, user testing and campaign creation. The initiative had an editorial reach of more than 700 million people and social media audience in excess of ten million. Both process and output sparked discussion about including girls and young women at the centre of digital design. Sheboard showcased the power of Equality Tech's girl-centred methodology as an advocacy tool to raise awareness of the consequences of bias in technology and the opportunities to involve women in creating technology to advance equality, as well as to influence tech sector actors.

Another Equality Tech idea which has generated interest in the wider tech sector is a new beauty filter prototype, proposed by workshop participants to address the negative impacts of the ubiquitous use of beauty filters on social media. The new Equality Tech alternative offers girls the opportunity to celebrate who they are focusing on their personal, not physical, attributes. Plan has presented the low fidelity prototype, the girls' perspectives, and the Equality Tech methodology to tech sector actors, to learn how it can connect with their priorities and feedback.

Through the Samsung Electronics Nordic partnership, Plan also engaged in Samsung's 'Solve for Tomorrow' 2021 global contest challenging youth to demonstrate how STEM solutions can help improve their local community. This programme brought together industry experts with girls and youth to support them in becoming innovators of technology to solve society's most pressing issues. The winners, girls aged 18-24, put the Equality Tech concept and methodology into practice while they were developing their ideas.

Most recently, Equality Tech programme participants have prioritised misinformation and digital safety, and proposed a prototype to raise awareness of the issue which will be launched later in 2022. These efforts will also use alarming evidence from Plan's ['The Truth Gap'](#) report, which interviewed 26,000 girls and young women from 26 countries and found that 9 in 10 have been harmed by false information and lies online.



The co-creation process with girls will also develop diverse female user personas that reflect their lives, digital literacy and behaviours, clearly indicating what is unique about their digital preferences and how they would interact with and utilise tech solutions. In future, Equality Tech will also create more methodologies, prototypes and educational resources that take a holistic approach to bridging the digital divide. Feedback loops will enable the approach to be constantly improved and shared with the public, as well as the tech sector, for improved awareness and practice.



## Key takeaways

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**International CSOs like Plan International can and should play the role of enablers and supporters, not the leaders of their work.** The organisation's focus is changing from brainstorming digital solutions with girls to designing girl-centred methodologies that create safe, inclusive spaces where they can discuss issues that affect them. In these spaces, participants can ideate digital solutions and design programme activities to raise awareness and engage other peers. With this approach, solutions and activities become girl-centred and girl-led.

**Girl-centred design is only possible when every stage is girl-centred. The design process must be iterative and constantly improved by lessons being learned.** Engaging girls as early as the concept phase helps understand the big changes that a programme should be contributing to and what success will look like from their point of view. A feedback process should be established to continue learning from girls not only at the initial design phase, but also throughout project implementation. This allows insight at every interaction to assess if girls are meaningfully engaged and if value is being added to their lives. Facilitators and programmers will need to utilise an array of tools, methods and approaches to gather these diverse needs, perspectives and voices.

**Design must include reflecting on our own biases.** We all come from places and experiences that have shaped our thinking and perspectives, and tend to unconsciously embed these in the things we make. The risk of not reflecting on this is that tech design may reinforce negative stereotypes about particular groups of people, which could be harmful to your stakeholders.

**The tech sector is a relevant ally and partner in all efforts to mainstream girl-centred design methodologies.** In the early stages of Equality Tech, the programme objectives and focus areas were designed with innovation partners from the tech sector, but in future these will be co-created with girls and young women, engaging tech sector actors in roles as technical experts, mentors and enablers of the spaces for girls to create and innovate technology, and allies to raise awareness across the tech sector.

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## The next 5+ years...

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Understanding the technology context in each country and how it relates to girls will be critical to localising the Equality Tech approach. This will ensure that digital solutions stem from the needs, wants, priorities and dreams of the girls involved. The methodology will need to be piloted with different country offices to integrate it into Plan's programmatic areas.

Equality Tech aims to unify all efforts to engage girls and young women as creators and innovators of technology and policies to advance gender equality in this space. One critical need is to build evidence to address the notable gap in reliable data on women's and girls' participation in the technology sector, especially outside of the global north. Plan International will draw upon the most relevant and powerful evidence using formal research, girls' and women's own testimonies of the impact of policies, insights from partners working for children's and women's rights, and monitoring and evaluation data from its own programmes.

A key opportunity is to promote girls' leadership as a core approach to advocating for the digital empowerment agenda. Ensuring girls' leadership is central to advocacy and wider influencing to promote girls' digital literacy and closing the tech gender gap. This includes supporting young advocates and working with young feminist movements who wish to be leaders in various aspects of their lives, including online spaces, as digital rights defenders, and as partners in advocacy work with decision-makers at all levels of power.

Equality Tech also seeks to advance equity in AI by developing and standardising tools and services - like girls' rights impact assessments - for the tech sector, to provide an inclusive process to engage girls and young women as equals during planning, deploying, and monitoring phases. With tech partners, Plan aims to pilot test Equality Tech processes that put the needs of young women and girls at the centre of AI design and create best practices with the potential to be replicated by the broader tech sector.

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