

Laaha 

A virtual safe space
for women and girls



FROM HUMAN CENTERED TECHNOLOGY DESIGN TO WOMEN AND GIRLS-CENTERED DIGITAL PRODUCTS ADDRESSING GENDER-BASED VIOLENCE

DESIGNING GBV TECH SOLUTIONS FOR WOMEN
AND GIRLS LIVING IN HUMANITARIAN CRISIS

Working Paper

AUTHORS:

Elfriede MF Kormawa (GBVIMS+ Deployment Consultant), Abeera Akhtar (GBV Technology Products Management Consultant) and Joan Mneney (eRPW Technology Product Management Consultant)

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ABSTRACT:

When the COVID-19 pandemic broke, the digital transformation accelerated with internet use pushed up 70%¹. **However, many innovations used at field level do not respond to the specific needs of women and girls and in some cases can put them at risk of further harm.** Women are greatly underrepresented in the field of software development - 5% of the global workforce². As such, gender biases are often reinforced in the design of digital products and optimized for use by men³. The capitalization on digital technologies will continue excluding further women and girls from a society they are already discriminated against.

Since 2019, UNICEF (United Nations Children’s Fund) has been leading on the development of two digital products addressing GBV: Laaha, a Virtual Safe Space (VSS) [platform](#) and the digital GBV referral pathway [app](#) (hereafter eRPW). From its onset, extensive investment was made in user research to ensure digital products were co-created by women and girls in Bangladesh, Iraq, Ecuador, and Zimbabwe. This process required a radical re-think on how practitioners conceive human-centered design and inclusion. With the key aim of mitigating unintended gender bias in the development cycle to ensure that women and girls are at the center of the design, testing, and implementation, **UNICEF has produced accessible digital products led by the voices of diverse women and girls, which are age-appropriate, adapted to low connectivity and low literacy settings and built around safe and secure frameworks.** Based on the field-tested methodology, UNICEF has compiled a lessons-learned report on how to build, roll out and sustain digital products for women and girls in a variety of humanitarian settings, in a safe and ethical way.

¹ <https://www.forbes.com/sites/markbeech/2020/03/25/covid-19-pushes-up-internet-use-70-streaming-more-than-12-first-figures-reveal/?sh=5a010ba93104>

² [Statista, 2021](#)

³ Beckwith, L., Burnett, M., Wiedenbeck, S., Cook, C., Sorte, S., and Hastings, M. Effectiveness of end-user debugging software features: Are there gender issues? Proc. of ACM Conference on Human Factors in Computing Systems ACM, New York 2005, 869–878.)

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ACRONYMS

AoR	Area of Responsibility
FTUX	FirstTime User Experience
GBV	Gender Based Violence
GBViE	Gender Based Violence in Emergencies
GBVIMS+	Gender Based Violence Information Management System +
HCD	Human Centered Design
ICT	Information and Communication Technology
LBS	Location Based Services
OSF	Open Society Foundation
PDW	Participatory Design Workshop
SMS	Short Message Service
SRH	Sexual Reproductive Health
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USSD	Unstructured Supplementary Service Data
VSS	Virtual Safe Space
WAG	Women and Girls
WGSS	Women and Girls Safe Space

BACKGROUND AND INTRODUCTION

The last decade has shown advancements in digital development globally. The outbreak of the COVID-19 pandemic acted as a catalyst driving the number of people online up by an estimated 800 million people: from 4.1 billion in 2019 to 4.9 billion in 2021. Internet usage during this period also peaked at 70%⁴. Today, for every five people globally, three are online⁵.

The central role of information and communications technologies (ICTs) and the internet in mitigating the negative health and socio-economic impacts of COVID-19 in many countries has been well documented globally. This included enabling survivors of gender-based violence (GBV) to access services through digital channels to overcome COVID-19 restrictions on mobility. However, the pandemic also highlighted- and exacerbated- existing inequalities between those with access to internet and/or mobile that can make use of digital communications services, and those who are excluded from using these services – women⁶. In low- and middle-income countries, women are 15% less likely to use mobile internet than men, and 7% less **likely than men to own a mobile phone. While the last 5 years have seen improvements in the trajectory towards closing the gender gap in mobile internet use, mobile ownership and use remain unequal⁷ and 50% of women globally remain offline⁸.**

Linked to this, there is also a gender digital skills gap in which women are less likely than men to possess advanced digital skills. Even in developed countries, only 1.4% of female workers are employed to develop, maintain, or operate ICT systems⁹. In the field of software development specifically, men are overwhelmingly represented at 95% of the global workforce¹⁰. This underrepresentation of women in the design and development of technology has the potential to- and in some instances does- encode and amplify gender biases into technology^{11,12}. **In humanitarian contexts, this is particularly worrying as adopting a gender-blind approach in the design and implementation of technology for women and girls -some of which could be GBV survivors - could result in discriminative care and/or further harm.**

Without meaningful access to digital tools, women and girls have fewer opportunities and face additional barriers in participating in the workforce and social life. **The capitalization on digital technologies will continue and unless they are addressed, gaps faced by women and girls will keep increasing, excluding them further from a society they are already discriminated against.** However, this unfavourable context also represents a unique opportunity for UNICEF and partners to increase digital adoption and use, as well as influence gender norms and create a safer digital world for women and girls.

In response to the need at field level to design safe spaces online for women and girls as well as provide safe and ethical tools for service providers to respond to GBV; since 2019, UNICEF has been leading on the development of two digital products addressing GBV. **Building on its expertise of over 15 years leading on the development of safe and ethical digital information management system, Primero/GBVIMS+, UNICEF developed two products: Laaha, a Virtual Safe Space (VSS) platform and, a digital GBV referral pathway app (hereafter eRPW) (Box 1 and Box 2). In developing these products, a human-centered design methodology was adopted at the onset and throughout.**

⁴ <https://www.forbes.com/sites/markbeech/2020/03/25/covid-19-pushes-up-internet-use-70-streaming-more-than-12-first-figures-reveal/?sh=5a010ba93104>

⁵ International Telecommunication Union (2021) Measuring digital development Facts and figures 2021

⁶ USAID Gender Digital Divide Primer: https://www.usaid.gov/sites/default/files/documents/DAI-1089_GDD_Primer-web_rev1_9.6.21.pdf

⁷ GSMA Connected Women The Mobile Gender Gap Report 2021

⁸ ITU, 2019. Facts and figures. Available at <https://itu.foleon.com/itu/measuring-digitaldevelopment/home/>

⁹ OECD (2017). Digital Economy Outlook 2017: ICT specialists by gender. Retrieved from: <http://www.oecd.org/internet/oecd-digital-economy-outlook-2017-9789264276284-en.htm>

¹⁰ Statista, 2021

¹¹ OECD (2018) Bridging the digital gender divide, include, upskill, innovate

¹² UN Women (2020) Discussion paper, THE DIGITAL REVOLUTION: Implications for Gender Equality and Women's Rights 25 Years after Beijing

The overall objective of this research which adopted human-centered design approach was to inform the development of Laaha and eRPW and ensure that these products directly responded to the needs and desires of women and girls, contextualized, and highly adapted to humanitarian and development contexts. Secondary objectives of this research were to inform the development of guidance and lessons-learned to be considered when building, rolling out and sustaining digital products for women and girls in a variety of humanitarian settings, in a safe and ethical way.

BOX 1: LAAHA A VIRTUAL SAFE SPACE PLATFORM



Safe spaces for women and girls have been established as a key approach to engaging adolescent girls and providing them with key information, links to services, and access to skills-building, peer connection, and support. Yet, access to physical safe spaces is often limited for adolescent girls in humanitarian contexts because of security concerns, gender norms and domestic responsibilities, availability and access of safe spaces, and, more recently, the Covid-19 pandemic.

In response, UNICEF created 'Laaha', a virtual safe space platform created by adolescent girls and women for adolescent girls and women. It is the first of its kind for use in both humanitarian and development settings that responds to context-specific accessibility requirements and accounts for digital gender gaps. Laaha provides adolescent girls and women with information on gender-based violence (GBV) including links to services, information on sexual and reproductive health (SRH), as well as information related to rights, life skills, identifying support, and relationships. Girls and women can access the digital platform to find support, ask questions, and seek services, in a safe way that replicates the sense of a safe social network. Laaha is currently building a user forum for girls and women to find peer-to-peer support through the platform.



BOX 2: GBV DIGITAL SOLUTION FOR SERVICE PROVIDERS; eREFERRAL PATHWAY (eRPW)



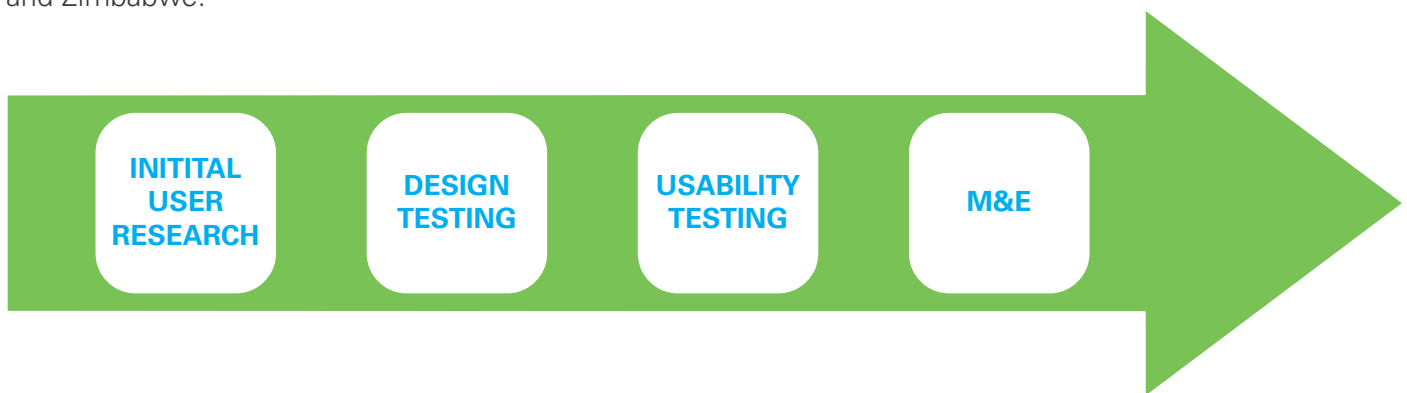
In humanitarian and fragile contexts, access to GBV services by survivors can be lifesaving. However, in most contexts, finding the appropriate service to respond to the survivors' needs can be uneasy due to the lack of harmonized and updated tools, among other challenges. Referral pathways are flexible mechanisms that safely link survivors to specialized services such as health, psychosocial support, case management, safety/security, justice, and legal aid. These referral pathways are often outdated and not widely disseminated. As a result, survivors often fall within the cracks and do not receive life-saving assistance in a timely manner.

To address this challenge, UNICEF, in collaboration with the GBV AoR, has developed the eReferral Pathway application (eRPW) for GBV service providers and coordinators. The application allows for real-time updating of available services and digitally maps the referral pathways thus making the information on the services available more accessible. Moreover, with the aim to ensure that services reflected in the eRPW are of quality as per GBV standards, UNICEF is currently developing a "Yelp" functionality that will offer the option to provide feedback to the GBV service providers registered and act as an accountability mechanism embedded in the app.



METHODOLOGY

Human Centered Design (HCD) and mixed method approaches were used in this research. The HCD refers to a problem-solving approach which includes the end-user from the very beginning and throughout the digital design process and centers their 'human needs'. Also referred to as 'participatory design', HCD strives to accommodate human needs into the 'usership' of the products^{13,14}. This methodological process in product design is highly iterative and was intentionally adopted to ensure that Laaha and eRPW products were user centered, included the right content, features, and functionality, presented in an accessible format to optimize user experience, and promote user engagement and interaction. Because of the challenges that come with developing technology products in humanitarian and development contexts with low connectivity and low literacy levels, it was paramount to ensure the final products was adapted to the needs of women and girls in these contexts. Additional considerations linked to designing GBV technology products, such as safety and security were also placed at the center of the process. For the pilot deployment and research of these products, UNICEF identified various contexts with different levels of connectivity, digital literacy, social norms and languages. As a result, UNICEF piloted these products in Bangladesh (Cox's Bazar), Ecuador, Iraq and Zimbabwe.



1. INITIAL USER RESEARCH

HCD initially focused on an investigative phase that allowed the researchers and designers to better understand their end users, the context in which they live, and their pain points. The initial research process revealed that safety and confidentiality were some of the main concerns women and girls had around accessing an online platform. Women and girls raised concerns about needing to register- or be identified when accessing information, and concerns about their search history being visible to others. For e-RPW, users raised challenges around fragmented information on GBV services or information not being up to date. Users also raised concerns about investing in creating a product that would not be well disseminated. **The initial research also intended to uncover any fundamental issues or opportunities that would guide the design process**¹⁵ (e.g., the need to ensure accuracy and reliability of the services registered in the eRPW, and the need for Laaha to ensure the safety and confidentiality of users). As a result, prior to the design of the technology products, UNICEF conducted an initial user research that focused on the following objectives:

- Understand women, girls and service providers' ICT access, habits, and barriers
- Assess content women and girls need and desire
- Understand current behaviors, facilitators, and barriers to seeking SRH/GBV information and services
- Explore the ideal technology products experience from the users perspective
- Identify key influencers and gatekeepers' attitudes towards these products (stakeholders mapping)
- Profile women, girls and service providers so as to personalize the strategy, content and user experience for the products

¹³ <https://www.toptal.com/designers/ux/human-centered-design>

¹⁴ <https://www.interaction-design.org/literature/topics/human-centered-design>

¹⁵ Blandford, A. (2019). HCI for health and wellbeing: Challenges and opportunities. *International Journal of Human Computer Studies*, 131(February), 41–51. <https://doi.org/10.1016/j.ijhcs.2019.06.007>

The user research stage relied on a mixed-method approach. Surveys, focus group discussions with homogenous groups of participants, key informant interviews, and participatory design workshops were all used across study sites in Bangladesh (Cox’s Bazar), Ecuador, Iraq and Zimbabwe. To understand varying levels of access to and usage of ICT and how to reach women and girls from the outset, the researchers were also intentional in conducting the Gender & ICT survey¹⁶. Due to COVID-19 travel restrictions and social distancing measures, the design team relied heavily on remote modalities. Components of the user research were conducted online at times leveraging existing UNICEF institutional tools for surveying, such as U-Report¹⁷.

In total, 478 participants were included in this phase of user research. They ranged in terms of age (young adolescents ages 12 – 14 years, old adolescents aged 15 to 17 years, adult women aged 18 + years), ethnicity and language, geographical spread (host communities vs. camps), migration status, socio economic class, with a subset of participants who self-identified as having a mental disorder and/or disability. SRH and GBV specialists from the United Nations, international non-government organizations, local organizations- including representatives specializing in programming for the persons with disabilities were included in key informant interviews. Findings from the research phase informed the development of user personas who were used as targets in the ideation phase to keep users’ needs, frustrations, and motivations centered.

2. DESIGN TESTING

Following the first research phase outlined above, low-fidelity clickable prototypes were designed, and virtual participatory design workshops (PDWs) organized. The objective of this phase of prototype testing was to co-create with end users and gather feedback on the usability of Laaha with regards to the onboarding process, homepage features and information architecture- including users branding preferences and visual elements (colours, design template, graphics, informational videos etc.). Participants of varying ages (young and older adolescents and adult women), literacy (high literacy, low literacy, and illiterate), geographical location (rural & urban), and ICT skills were grouped into small homogenous groups and invited to participate in over 11 virtual testing sessions. Due to COVID-19 movement restrictions only women and girls with access to mobile phones and/or computers were included which unfortunately limited access to the most isolated most vulnerable girls and women. Real time, structured feedback was obtained using a discussion guide and card sorting. Key behavioral and attitudinal patterns were identified through this process that facilitated the prioritization of features in the development of the final products.

3. USABILITY TESTING

Following the design testing, further improvements were built into the earlier prototype to again be tested by end users. The field trial and co-creation session was planned to gather impressions of the ‘look and feel’ of the features and content of the Laaha prototype, understand users experience journey, test whether the model for browsing matched participants thought process for content searching, and to understand real world issues faced by end users under realistic conditions.

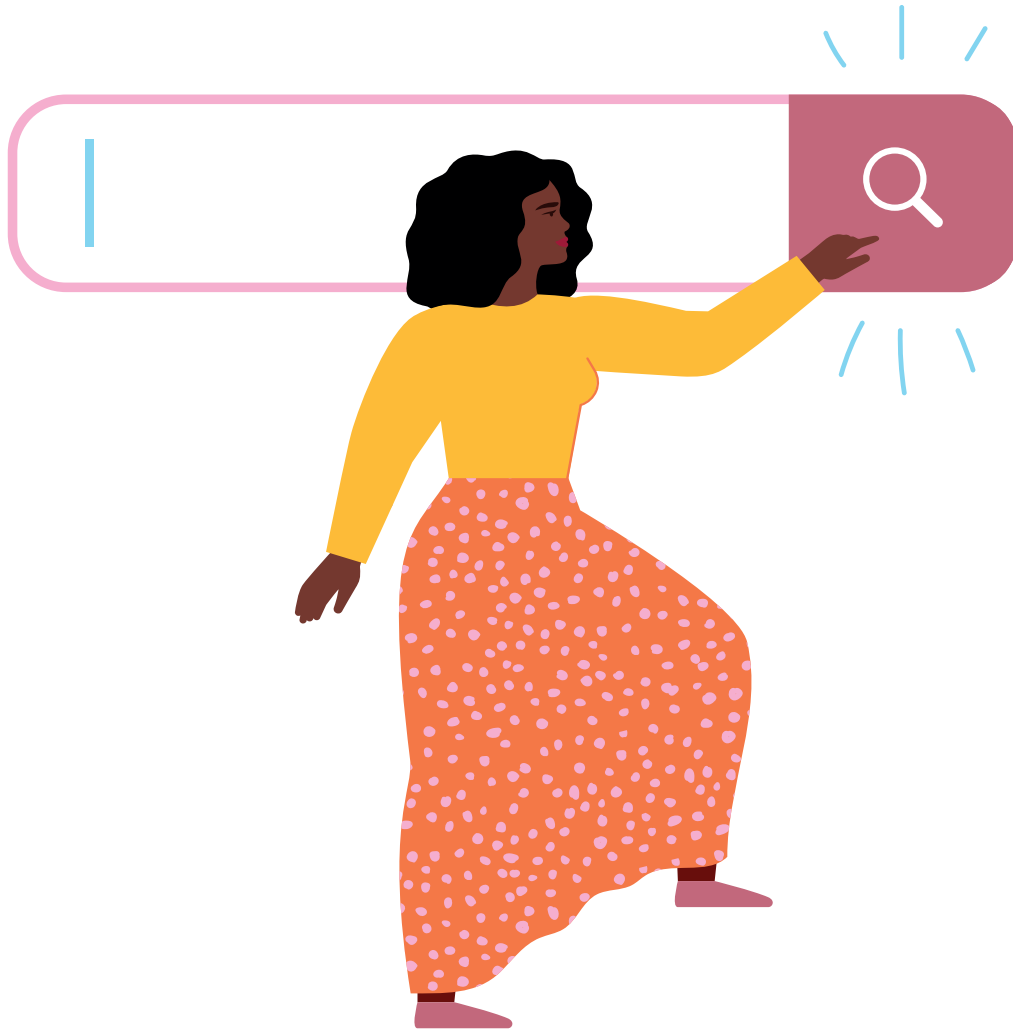
Designed in three-stages, the research and design team conducted ‘introductory calls’ with participants to screen profiles and gain consent for participation in the usability testing. This was followed by a 7-day ‘free use’ period where participants were encouraged to use the tool as they would in everyday life. Check-in sessions were held on days 1, 3, and 5 and participants were asked to document their experience in a diary which was then shared with the design team. The final stage included a virtual co-creation session which was facilitated using a discussion guide and included an external observer. In line with other stages of the design process, women and girls ranging in age, geographical location (rural and urban), immigration status and disability were invited to participate in this phase.

¹⁶ <https://digitalprinciples.org/de/resource/genderand-information-communication-technology-ict-survey-toolkit/>

¹⁷ UNICEF’s U-Report is a messaging tool that empowers young people around the world to engage with and speak out on issues that matter to them. Find out more here: <https://www.unicef.org/innovation/U-Report>

4. MONITORING AND EVALUATION

The co-designing, building, testing, and refining of the products was a continual process that was and is essential to ethically designing and building technology that is culturally sensitive, sustainable, and relevant for the target population. While the products are now being launched, similar iterative and human-centered methods will be used to monitor their implementation and refine later versions of the products. A monitoring and evaluation framework is under development to continuously gather qualitative and quantitative data from end users to contribute to the enhancement of the products.



FINDINGS

All phases of the user research provided rich information on the barriers that women and girls face in accessing and using technology. Here are below some key considerations for building technology geared towards women, girls, including those who are survivors of GBV and/or belong to marginalized groups in humanitarian settings.

1. BE INTENTIONAL ABOUT PROJECT TEAM COMPOSITION

The UNICEF project team was intentional in recruiting female user researchers at country level who had previous experience gathering data from women and girls and background knowledge on GBV.

Additional criteria for preferred candidates in the job advert included researchers that shared similar cultural and linguistic backgrounds of the women and girls being targeted, and those with prior understanding of the socio-cultural context in which these tools were being piloted. These criteria's when recruiting researchers were 'essential', as lessons learnt at the expense of UNICEF during an initial pilot phase demonstrated that candidates with limited understanding of the socio-cultural contexts faced greater challenges with relating to the realities of the women and girls on ground.

Similarly, UNICEF also partnered with local and international organizations working with women and girls to identify and recruit enumerators for data collection. These partnerships were beneficial as these enumerators were often from the same population and had prior experience and exposure to the local communities which facilitated trust building between the researchers and the respondents.

UNICEF project team were also cognizant that technological products are often developed by male teams, and rarely responds to the needs of women and girls. To address the gender bias, a female team of developers was requested to work on the technology development of the products.

2. DESIGN WITH WOMEN AND GIRLS, NOT ON THEIR BEHALF

Women and girls, including GBV survivors alike are not a homogenous group. At several steps of the development process, the UNICEF project team which included technical specialists at country, regional, and global levels considered how women and girls from the targeted communities would respond to specific features or content. A wide range of potential users including SRH and GBV service providers tested and provided input on the direction taken. Only those that consented to participating in the user research were engaged.

Women, girls and service providers included in the research differed in age, disability status, socio-economic status including traditional literacy level, displacement status, socio cultural practices, geographical spread (rural & urban), sexual minority status (LGBTIQ+) and family composition, as well as differences in lifetime experiences of GBV, computer literacy and digital access. Furthermore, to maximize the range of feedback, women and girls who were beneficiaries of UNICEF programming, and those who were not were invited to participate.

For each decision made by the UNICEF project team and developers- from the color pallet and website branding to the content hosted on the platform- feedback from women and girls acted as the 'point of truth' in informing the decision making.

Potential risks that could increase vulnerability among women and girls participating in the feedback at all phases of the research process were also considered and accommodated. For example, the duration of feedback session and time of day which they were organized was adapted to suit the needs of respondents.

Women and girls were also able to share feedback on more than one occasion; and for some of them, the costs borne out of participating in the research reimbursed e.g. data bundle.

This process of co-creation ensured that the products recognized and accounted for the diverse needs of end users. The UNICEF project team did not just design for women, girls, including those who are survivors of GBV and/or belong to marginalized groups, but designed *with* them.

3. SAFETY AND CONFIDENTIALITY CONSIDERATIONS MUST BE PRIORITIZED WHEN DESIGNING GBV TECHNOLOGY PRODUCTS

GBV applications and platforms do not often account for the varying lived experiences of women and girls, make provision for perpetrator's backlash, or integrate robust data security features into their technology; especially in contexts where the governments are oppressive of women's rights, inhumanitarian contexts, and some low-resourced settings.

Recognizing this, the UNICEF project team were extremely careful about prioritizing security when building Laaha and eRPW whilst incorporating flexibility into the design of Laaha to accommodate different profiles of women and girls. The user research demonstrated that mobile phone ownership varied from context to context and between age groups. In Iraq and Ecuador respectively, 84% and 85% of women (aged 15 – 49years) owned their own mobile phone. Conversely, among adolescent girls aged 12-14 years, there was high sharing behavior with 60% of adolescent girls in Ecuador sharing their mobile phones with parent/caregiver and/or sibling. **The frequency of sharing devices was even higher among displaced populations affected by humanitarian contexts. In situations where digital devices were shared women and girls expressed experiences of being monitored by family members, such as spouse, while accessing digital content.**

All respondents irrespective of ownership ranked privacy and security the most important to be prioritized in the building of digital products for women and girls.

Technological Safety:

To accommodate the safety needs for these groups of women and girls, several security features were built into the products, especially in Laaha. Primarily, the products are hosted on the '[Acquia](#)' platform which has advanced security controls and built-in protection that includes strong access and authentication controls, as well as different firewall controls for best-in-class defensive security capabilities.

Many existing websites are built in such a way that gaining access to website content is contingent on registering and creating a user account through using an email address and password. The profile set up process to use Laaha is also optional. For a subset of users, the UNICEF project team recognized that this practice would be exclusionary; especially for women and girls who are illiterate or do not have their own email addresses. The additional threat of having 'persistent cookies' written into the devices memory and used to 'remember' user logins was also identified as a risk which could pose a security threat to women and girls who are concerned with privacy, especially in circumstances where their use of digital devices is monitored. To respond to this reality, the UNICEF project team chose to make all content on Laaha accessible without the need for users to register/sign in, a decision which has the additional benefit of positively impacting the potential reach of the platform.

In the same light, some women and girls; especially those with their own devices- did want options to register onto the platform with a provision for user verification to be built in. To accommodate this, additional security features were built. For example, Laha's profile set up intentionally does not ask for users to provide their name, and users can only select a graphic (e.g. flower). This is to mitigate risks against users from

usage of their names, or a female pseudonym, and photos which may be stigmatized. Some women and girls requested additional security measures to verify user identity when logging in. In later iterations of the tool the option of linking user registration to a trusted email address or mobile number will be built into the platform. Linked to this, many websites offer users the option to download a complementary native application that sits on the device homepage which can also be a cause of unintended harm for women and girls who would otherwise be discouraged from accessing the content of Laaha due to religious and social norms that stigmatize discussion of SRH/GBV. To account for this-especially in cases where phones are shared, the UNICEF project team chose not to develop a native application to prevent the discovery of Laaha on users' phones and ensure the user's navigation on the platform cannot be found by someone else.

Many users, irrespective of digital literacy, knew little how to clear their history after browsing or how to browse in private modes by using, for example Google 'Incognito mode'. To upskill the ability of women and girls to mitigate risks of others monitoring their activity while using the products, the UNICEF project team and the developers made additional provisions to include tutorials about browsing in safe mode and how to exit the website using the quick exit button.

Physical Safety:

The user research also highlighted that in some study sites (e.g., in Iraq), women and girls lacked basic knowledge about GBV, their rights, how to protect themselves, and knew little about their SRH information. Some of them expressed willingness to learn more about these topics, but relayed fear towards being 'caught' accessing this sensitive information. To mitigate these risks, the UNICEF project team integrated an 'eye-catching', 'exit website' button into the interface to allow users to quickly leave the website and be automatically directed to 'trusted' site (e.g. Google search).

The project team also included a 'call-to-action header' for those women and girls who need updated information on how to access needed services (SRH, psychosocial support, legal, financial, and housing services) in their area. To meet the request that details of service providers be tailored to the location from where women and girls are accessing the website, the UNICEF project team plan to link this feature to a built-in location-based service (LBS) which uses an interactive map that updates depending on the location of the user.

4. BUILD FOR ENVIRONMENTS WITH LOW, NO, AND INTERMITTENT CONNECTIVITY

Whilst many women, girls and service providers included in the user research had access to electricity, for some of them – especially those living in camps- access to electricity was at times discontinuous. The same was true for availability and access to internet with respondents reporting varied levels of bandwidth across sites. Among some of them, there was also high instance of using devices and operating systems that were old e.g. 4-6 years such as Nokia feature phones and second-hand Android smartphones. To respond to this reality, at baseline, the UNICEF project team assumed low bandwidth and interrupted internet access. For eRPW, this informed the decision to develop a Progressive Web App that can be accessed offline. In addition, it raised the need for an exploration of the Unstructured Supplementary Service Data (USSD) and Short Message Service (SMS) version of the eRPW enabling service providers with basic mobile phones without internet capabilities to equally access, view and update services on the referral pathway. For Laaha, the team had to leverage low to no connectivity with the risk involved in building a native application on mobile phones due to security concerns previously mentioned. However, Laaha also optimized all website content (especially video) to be compatible with older mobile devices (and desktops) and different screen sizes. **They also worked with instructional designers that ensured that the content created was also optimized for low-connectivity settings so while it included customized illustrations and interactive elements, it is tailored to be used by women and girls in low connectivity settings and with limited digital literacy.**

5. DEVELOP ACCESSIBLE DIGITAL SOLUTIONS INCLUDING FOR USERS WITH LOW LEVELS OF LITERACY

Women, girls, and service providers that participated in the user research had varying levels of literacy and computer literacy. Whilst digital literacy was high among older adolescent girls and young women (aged 17-19 years), older women (35+ years) and married adolescents included in the user research were often restricted from accessing mobile phone as they were busy taking care of the house, children and their in-laws. Whilst other edutainment channels are being explored as means to capture women and girls with no literacy or exposure to digital products (e.g. radio or TV-supported campaigns) the UNICEF project team still aimed to make Laaha accessible to women and girls with low literacy.

To optimize the use of the platform among users with no or low literary levels and limited digital exposure, the UNICEF project team were intentional in simplifying the first-time user experience (FTUX) to ensure that women, girls, and service providers were not turned off from a complex sign in process. Linked to this, language features have been built into the platform to allow for users' language to access in the default language for their country and easily switch between languages' as well. Assumptions were also made that most users would be low ability readers and so audiovisual queues were used whenever possible to accompany inputs required by users. Text on the products is limited to reduce cognitive load and facilitate reading comprehension, and audio-visual components like graphics, videos, images were prioritized over text in terms of content hierarchy. Laaha also incorporates audio features such as 'audio search', voice over for text-based media. Content on the site is also presented in short bite sized clips and case studies address one topic at a time and have audio and subtitling options.



Young adolescent girls were particularly interested in learning through playing games and stories and receiving learning in a fun manner. To respond to this, the UNICEF project team have incorporated interactive games, quizzes, visual prompts and digital rewards for participation (e.g. digital certificate or badge). Future iterations of the platform will further enhance gamification to encourage interest and participation amongst users. One way this is being done is by collaborating with private sector developers, including those from the gaming industry to advise and build more of the appealing, and interactive gaming aspects of the platform for adolescent girls in low connectivity settings.

The UNICEF project team was also conscious of developing the products to reach vulnerable women and girls, particularly those who face higher levels of marginalization such as women and girls with disabilities. Acknowledging the unique challenges faced by women and girls with disabilities in this regard, the UNICEF project team collaborated with disability specialists from the early phases of the project and held dedicated user testing sessions with users with disability throughout the research phase ensuring to incorporate their feedback into the product. As a result, the platform adheres to [WCAG 2.0](#), the web content accessibility guidelines that define how to make content more accessible to those with disabilities.

As a complementary action to rolling out Laaha, service providers offering WGSS should invest in improving the digital literacy of the women and girls that access their space(s) in addition to existing programming offering traditional skills building in reading and writing, so that women and girls can develop the confidence to use technology. In these environments, service providers could establish computer and/mobile phone/tablet “labs” and/or host digital boards that use audio-visuals to disseminate updated information about the referral pathway and/or key messages related to GBV. Especially for those women and girls that cannot at all have access to digital product like Laaha; additional complimentary efforts to improve accessibility to the information could be making links with other media channels to air some of the information from Laaha. Other good practices include creating partnerships with network providers (e.g. Zain in Iraq) to give accessible connectivity to women and girls who connect on the platform.

6. CULTURAL REPRESENTATION, DIVERSITY, AND CONTEXT MATTER

Accessibility & Representation:

A wide range of women, girls and service providers were engaged in the user research each with their own unique perspective and lived experiences. To ensure that visual content on the products and case studies used were relatable, the UNICEF project team tested varying illustrations of women and girls of different ages, body types, skin color, religion etc. in both Ecuador and Iraq.

While user feedback confirmed that diversity and representation in the illustrations was welcomed by all users, there was additional feedback from women and girls in Ecuador that highlighted the importance of using visuals that resonate with end users and reflected their real-life societies. For example, while the use of a women and girls’ avatar with a hijab in the Ecuadorian context was not immediately recognized, avatars that were more representative of the indigenous communities were more relatable. The UNICEF project team intends to undertake similar exercises with women and girls in contexts the tool will be rolled out in ascertain which visuals best respond to the lived realities of end users.

Women and girls also shared a preference for communication (visual and verbal) that transmitted messages in a more positive light. To respond to this and as a method of reducing stereotypes a conscious effort was also made by the UNICEF project team showcasing diverse ranges of women in a positive light, assuming positions of power in highly respected professions often associated with men. Similarly, concerted efforts were made to reduce the use of images that could potentially traumatize women and girls recognizing that some may be GBV survivors and other vulnerable populations.

Cultural norms:

The use of the digital products for GBV programming is one component of a larger response to strengthen availability, accessibility, and quality GBV response services. The UNICEF project team acknowledges that the products would be used (or not) within the framework of existing cultural practices and norms so complementary measures will have to be put in place to create an environment where they are adopted among target users. For example, in Iraq, some gatekeepers were particularly concerned about online safety and restricted access and usage of mobile phones and internet of adolescent girls. Oftentimes, this was reportedly linked to cultural stigma, associated fears of girls being coerced by men and boys online with limitations placed on daughters' access to avoid loss of face and honor, and to avoid being ostracized by their community. However, this resulted in girls' lack of access to digital space to find information and seek for help.

Acknowledging that some cultural barriers may act as a bottleneck for women and girls access to digital products, the UNICEF project team aim to encourage gatekeepers to allow girls to use Laaha by establishing partnerships with local champions and community-based staff that will be tasked with the responsibility of sensitizing guardians' approval of Laaha. The hope of this action is that it would facilitate access to the platform for themselves and their daughters. Models that could be adopted for this community outreach include, door-to-door or sessions in already existing female-only spaces in camps, training gatekeepers (especially mothers, siblings, and mothers-in-law) to use Laaha, and cascading training to other women and girls in the community via tent-to-tent or group activities at home. Specific topics to be prioritized to upskilling women and girls would be topics around using the internet safely.

Women and girls also shared the preference for a female-only environment built into Laaha which offered the possibility of asking questions, socializing with, and learning from other females in an anonymous manner. In response to this, the UNICEF project team will build into future iterations of the platform a moderated user form for specific age groups as well as a chatbot feature to assist women and girls in finding the content they wish on Laaha.



Recommendations for building tech product for women and girls

Based on the findings, UNICEF was able to extract recommendations when creating digital products for women and girls and/or GBV programming.

1. Be intentional about project team composition: recruiting female user researchers with similar cultural and linguistic backgrounds of the women and girls being targeted, and with prior understanding of the socio-cultural context. Consult, partner, and collaborate especially with local women's organizations.

2. Design with women and girls, not on their behalf: co-create with a wide range of women and girls to ensure that the diverse needs of end users are accounted for. Consult them at various stages of the product development from the beginning to the monitoring and evaluation, and during the maintenance stage of the live product.

3. Prioritize safety and confidentiality within the technology: Safety and security of users should be placed at the center of the product development. When bargaining on technical considerations, safety and security should always come first, at the expense of more sophisticated features.

- Collect as little data from users as possible.
- Consider perpetrator's backlash, especially in contexts where phones are shared within households.
- Include quick 'exit website' or 'wipe data' options and always provide guidance to users on how to navigate the site safely.
- From a product design perspective prioritize the testing of the layout and positioning of the call-to-action and 'exit' buttons.

4. Build for environments with low, no, and intermittent connectivity, old devices and operating systems and optimize all digital content (especially video) to be compatible with intermittent internet and different screen sizes.

5. Develop accessible digital solutions including for low skilled and low literate users that are highly interactive (through gamification) and adhere to WCAG 2.0, accessibility guidelines and material design principles.

6. Cultural representation, diversity, and context matter therefore test varying illustrations of women and girls of different ages, body types, skin color, religion etc. among the population for digital solution rollout. Ensure visuals and case studies used resonate with end users and reflect the real-life societies. Lean on transmitting messages in a more positive light.

7. Consider cultural norms and invest in complimentary measures to create an enabling environment where the digital solution can be used by the target population e.g., through partnerships with local champions, community-based staff and/or local gatekeepers. When possible leverage other platforms to share information on the same content offline (e.g. SMS, radio, TV) for users that do not have access to internet or data bundle.

8. Refine and repeat: product development, implementation, and monitoring should be a continual process whereby feedback is gathered from women and girls on product efficiency and relevance. This feedback should inform how future iterations of the product are refined and implemented.