



Humans
in the Loop



Women's Peace &
Humanitarian Fund
A United Nations & Civil Society Partnership



CASE STUDY: WOMEN'S TECH HUBS MOLDOVA

ACKNOWLEDGEMENTS

This case study was written by Tiara Sahar Ataii (Global Economic Resilience Advisor, War Child Alliance) and designed by Aya-Florence N'Gotta (Fundraising Engagement Assistant), with many thanks to the following persons involved in the design and implementation of the tech hub: Liliana Rotaru, Livia Marginean, Ala Nosatii, Irina Ciumac, Olga Caraman, Daniela Buinovschi, Veronica Donciu, Eugen Danilov, Diana Andrusceac, Zinaida Braslavschi (all CCF Moldova); Svetlana Haraz, Ecaterina Gamurari, Aliona Melentieva (all ULIM); and Hester Gartrell, Magdalena Tsaneva, Ghazaleh Alhabib, Rositsa Vasileva, Lara Chadwick, Mercy Francis, Joy Kiprop (all HITL).

This publication is produced with funding from the Women's Peace & Humanitarian Fund, however the views expressed and content included does not imply official endorsement or acceptance by the United Nations.

CONTENTS

1 - INTRODUCTION TO TECH HUBS	1
1.1 Rights based approach	1
1.2 Theory of Change	2
2 - TECH HUBS IN MOLDOVA	3
2.1 Moldovan context	3
2.2 Programme design	3
2.3 Targeted demographic	4
2.4 Training curriculum	6
3 - METHODOLOGY	7
4-KEY LEARNINGS	8
4.1 Knowledge Acquisition	8
4.2 Accessibility	9
4.2.1 Hybrid training	10
4.3 Self confidence	13
4.4 Employment prospects	16
4.5 Consortium design	18
5 - OPPORTUNITIES FOR COMPLEMENTARY PROGRAMMING	20
5.1 Online labour market assesments.....	20
5.2 Safe use of the internet training.....	20
5.3 Domestic labour law training.....	21
5.4 Employment mentorship.....	21
5.5 Psychosocial support and/or social work.....	21
5.6 Digital inclusion.....	21
5.7 Financial inclusion.....	22

ACRONYMS AND SHORTHAND

CCF: Copil, Comunitate, Familie

DRC: Democratic Republic of Congo

FGDs: focus group discussions

HITL: Humans in the Loop

Informants: staff of the partners who participated in a key informant interview

KIIs: key informant interviews

MEAL: monitoring, evaluation, accountability, and learning

MHPSS: mental health and psychosocial services

Partners: the implementing and evaluating partners of the project, namely, CCF, HITL, ULIM and War Child

Respondent: participants who responded in a survey

ULIM: Universitatea Liberă Internațională din Moldova

WCUK: War Child UK

WC: War Child UK and War Child Holland in collaboration, in recognition of the merger of the two bodies from January 2024 onwards, and their joint operations in the Ukraine response

1. AN INTRODUCTION TO TECH HUBS

The tech hub approach is derived from a collaboration between WCUK, Humans in the Loop, and FiftyEight¹ in the Democratic Republic of Congo. It is defined as the establishment of a one-stop-shop for online livelihoods, such that participants can access: electricity, the internet, relevant hardware and software; training on IT skills, including basic IT skills, basic facility with major internet languages, and/or vocational skills such as digital annotation; and linkages to the online labour market.

The purpose of a tech hub is to enhance access to all relevant inputs to the internet and to ensure that participants are capacitated to enjoy the advantages that the internet has to offer² both in terms of greater remuneration and ability to access key services, information, networks, and educational opportunities. The tech hub approach both prepares participants for employment online and also enables youth to take advantage of the internet as a gateway to other services and tools. Built into the tech hub approach are requisite safeguarding standards in recognition of the danger that the internet also poses.

The tech hub also addresses a major blind spot in livelihoods programming that treats unemployment amongst youth as purely a supply-side issue (youth are deemed under-capacitated and training will allow them to find jobs) rather than a demand-side issue (the domestic market has a surplus of labour and weak demand).

A tech hub is the establishment of a one-stop-shop for online livelihoods, such that participants can access: electricity, the internet, relevant hardware and software; training on IT skills, including basic IT skills and/or vocational skills such as digital annotation, and other skills required for freelancing online; and linkages to the online labour market.

Tech hubs therefore address this issue by connecting participants to the global market, which is more diversified and therefore offers more consistent opportunities than relying exclusively on domestic markets. This is especially the case in rural areas, especially in WCUK's countries of operation which are conflict affected and have low or even negative economic growth. For tech hubs, WCUK targets 'digital deserts' which are areas where there is little or no internet connectivity, and where the majority of inhabitants have few IT skills.

1.1 Rights-based approach

The tech hub approach reinforces War Child's rights-based approach to livelihoods programming. Training on IT and tech skills contributes to the right to enjoy the benefits of scientific progress³, especially when compared to livelihoods projects which direct participants, often quite prescriptively, to opportunities that are not profitable, are not in line with the modern economy, and which may contravene their rights to a decent living for themselves and safe and health working conditions⁴. Furthermore, the inclusion of English skills and basic IT skills contributes to the right to fundamental education⁵ and/or continuing education for those persons who have not received or completed primary education, which is often found amongst rural women⁶. The tech hub approach, by integrating safe usage of the internet training also reflects the potential benefit and harm of internet through enabling youth to practice their right to information whilst being protected from media that would be harmful to them⁷. Finally, the women's empowerment lens in this project contributes to the elimination of stereotyped concepts of the roles of men and women⁸.

¹FiftyEight undertakes research and develops technology solutions to achieve good work free from exploitation. WCUK continues to partner with them on the global level. They did not partner in this project as their focus is primarily on labour exploitation and limited funding did not allow for this project to engage in prevention of labour exploitation alongside the vocational training. See Section 2 below.

²Article 15(b), International Covenant on Economic, Social, and Cultural Rights

³Article 15(b), International Covenant on Economic, Social, and Cultural Rights

⁴Article 7(b)(c), International Covenant on Economic, Social, and Cultural Rights

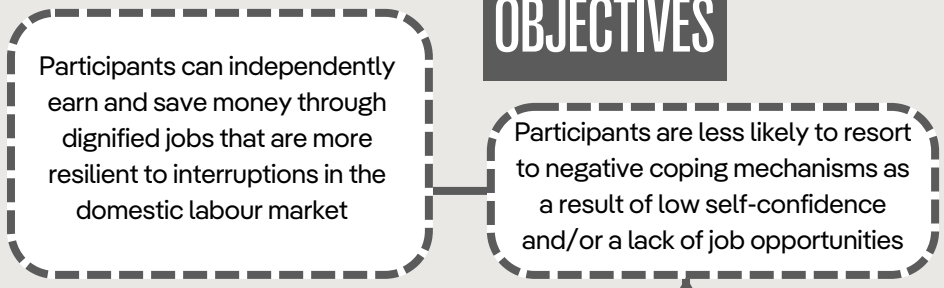
⁵Article 13(d), International Covenant on Economic, Social, and Cultural Rights; Article 10(e), Convention on the Elimination of All Forms of Discrimination Against Women

⁶Article 14(2)(d), Convention on the Elimination of All Forms of Discrimination Against Women

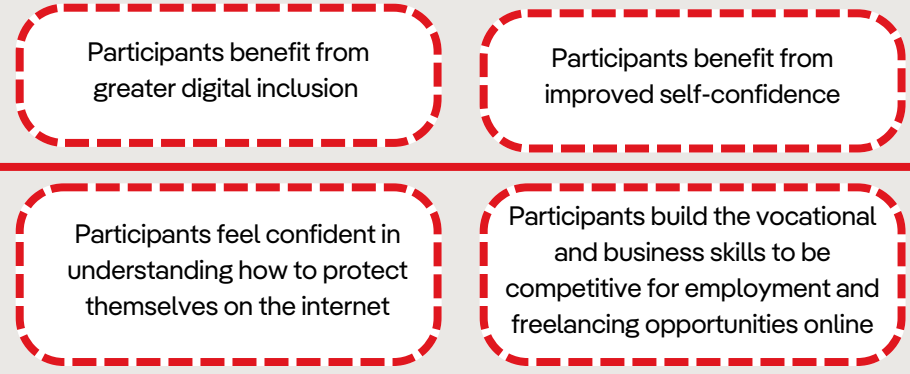
⁷Article 17, Convention on the Rights of the Child

⁸Article 10(c), Convention on the Elimination of All Forms of Discrimination Against Women

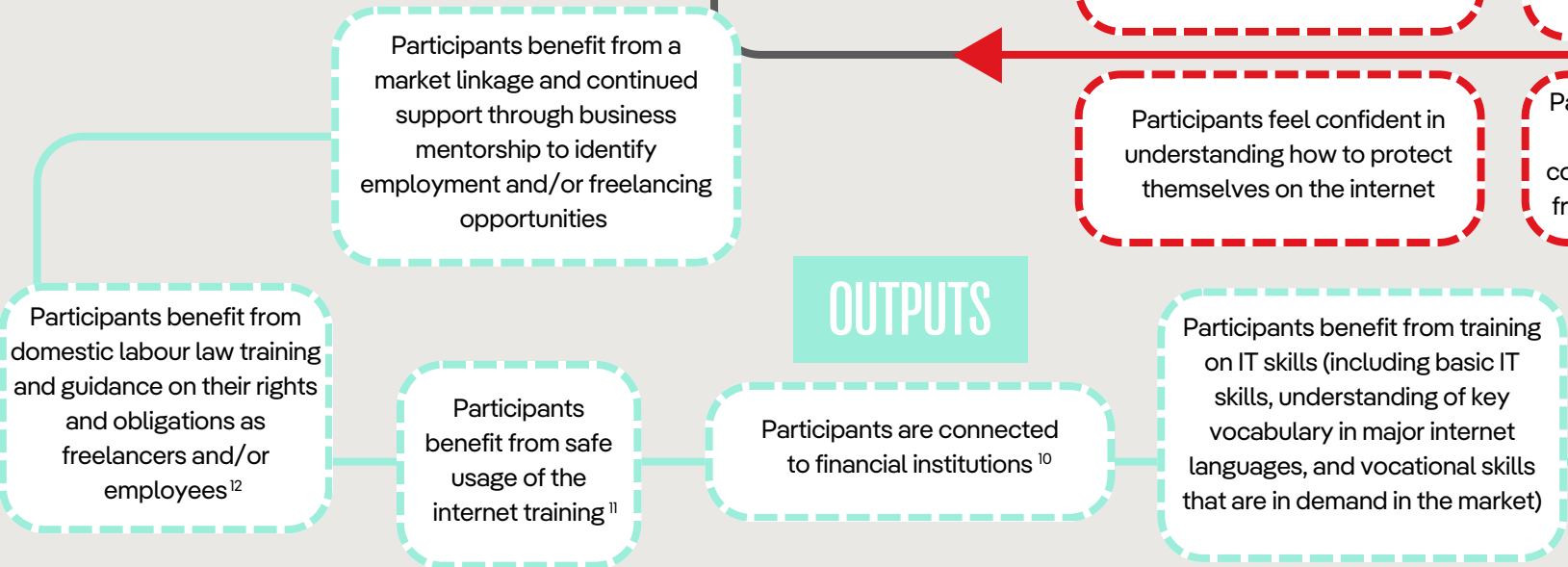
OBJECTIVES



OUTCOMES



OUTPUTS



CROSS-CUTTING THEMES



1.2 THEORY OF CHANGE

Gender: women and girls' barriers to access are identified and addressed in programme design; where these cannot be addressed in a mixed-gender setting, women and girls access trainings dedicated to them.

Disability: meaningful access is provided to persons with disability through identifying barriers and addressing these in programme design.

Safeguarding: labour market assessment takes into consideration risks from exposure online, such as labour trafficking; data breaches; exposure to traumatic material, and employment opportunities that minimise these risks are prioritised. Societal acceptance is ensured through proactive community engagement. Safe usage of the internet training addresses risks of grooming and/or sexual exploitation.

Accountability to the affected population: participants guide the selection of training and market linkages based on their needs and preferences for their career including through the use of a participatory market assessment.

Rights-based approach: participants are informed of their rights and obligations as employees and/or freelancers.

2. TECH HUBS IN MOLDOVA

2.1 Moldovan context

During War Child's response to the full-scale invasion of Ukraine, War Child identified that one of the major protection concerns facing vulnerable women and girls, both from Ukraine and Moldova, is labour trafficking. As the US Office to Monitor and Combat Trafficking in Persons identified in its 2022 report, '[t]housands of foreign nationals and Ukrainian refugees, predominantly women and children, who are fleeing the war in Ukraine and crossing the Moldova border seeking sanctuary, are highly vulnerable to trafficking', and '[m]ost victims are unemployed, from rural areas, and have received little education' and are 'overwhelmingly women and girls'¹³.

War Child also found in needs assessments and through close work with its partners in Moldova that women specifically struggle to find decent labour opportunities due to scarcity of childcare, and in the case of Ukrainian women, as they need to supervise their children who are not attending school in person because they are studying online with their schools in Ukraine. In areas which War Child surveyed in a needs assessment in July 2022, such as Donduseni, as many as 100% of Ukrainian children were not attending school in person, with over 60% citing language barriers as the main obstacle. Priority needs reported both by Moldovan women and Ukrainian women in the same needs assessment centred around livelihoods support, and when this was not available, ramifications included eating less nutritious food, borrowing money, eating less food, and engaging in casual labour¹⁴.

Therefore, War Child approached CCF with the suggestion of modifying the tech hubs approach established in DRC, to provide women with a livelihood that could be practised at home to provide the flexibility to allow women to manage household responsibilities. The tech hubs approach was specifically targeted at women in rural areas with limited education who are most at risk of trafficking. CCF is a national organisation focussed on addressing separation of vulnerable children from their families, and therefore they were well placed to identify vulnerable women who could benefit from the project.

2.2 Programme design

Continuing its partnership from the DRC pilot, War Child partnered with HITL for this project. HITL is a social enterprise that provides ethical image annotation to power artificial intelligence and is comprised of non-profit foundation which offers training programmes to vulnerable individuals and a for-profit company which then provides them with employment opportunities.

The initial consortium for this project therefore comprised of: CCF, which was responsible for participant targeting and registration, internal referrals to any social work services, selection of IT facilitators, and choosing the training location; HITL, which was responsible for providing the training

⁹ Component not delivered in this project, as it had been provided by other humanitarian actors

¹⁰ In areas where participants have limited financial inclusion

¹¹ Not delivered in this phase other than a small Cyber Security module: a comprehensive package prioritised for phase II

¹² Not delivered in this phase: prioritised for phase II

¹³ Last accessed on 21st September 2023 at <<https://www.state.gov/reports/2022-trafficking-in-persons-report/moldova/>>

¹⁴ Baseline needs assessment, Anenii Noi and Donduseni Rayons, July 2022

materials, online training facilitators, and providing a work project; and WC which was responsible for technical advisory support on livelihoods provision and MEAL, within the Project “Protecting Families – Supporting female empowerment and child wellbeing in Moldova”, funded by UN Women Moldova and the Women’s Peace & Humanitarian Fund.

The inclusion of ULIM came about as an unexpected and positive outcome of the tender put out to facilitate IT facilitators by CCF. Three ULIM staff members – the Dean of the Social Services Faculty, and two staff members of the IT faculty – suggested a group consultancy to cover the services of the project. Through this group consultancy, that would be contracted through the university, the tech hub could be hosted free of charge at the university IT labs and benefit from the support of the university volunteers, without paying any additional costs.

The ensuing implementing consortium (CCF, HITL, ULIM, WC) therefore included a national NGO, a social enterprise, a university, and an international NGO, which offered specific advantages to the project that are discussed in Section 4.5.

Targeting took place through internal and external referrals from CCF, and with criteria developed and cross-checked by WC’s Global economic resilience advisor. Targeting took place predominantly in rural rayons which had had the characteristics of ‘digital deserts’ (poor connectivity, most residents being unfamiliar with tech software and hardware, and having historically not had access to internet or a computer) without being fully without connectivity. All participants had gained access to a computer and the internet through their Refugee Accommodation Centre (in the case of Ukrainians) or through a library in the vicinity of their home (in the case of Moldovans), in large part due to the Ukraine response and work of NGOs in the last year and a half. It was regrettable that the project did not target households with no connectivity whatsoever, and this reflected the limited budget of the project that did not allow for provision of electricity, internet, hardware and software at the household level, which would have been necessary to ensure inclusion of such participants.

Following demographic data collected at registration that validated participants’ availability, it was decided that the training would take place in July and August to ensure that participants hoping to engage in further education could participate in the training, to make use of the university space for free, and to ensure the full availability of the university staff. Furthermore, given that many of the participants lived out of the capital Chisinau, it was decided activities would take place on Tuesdays and Wednesdays in-person, with self-paced activities completed from home on Mondays, Thursdays, and Fridays. To ensure accessibility for all participants, CCF offered free accommodation and travel stipends for participants in Chisinau for the two days of the training for the entirety of the 8 weeks.

2.3 Targeted demographic

Overall, 51 participants engaged in the training. 29 (57%) were from Ukraine, 20 (39%) from Moldova, and two identified their country of origin as Russia (one of which was stateless, and the other was Tatar). The average age at the start of the course was 26. Only one participant had a job, although several participants had accessed higher education (albeit it without being able to find a job thereafter). Higher levels of education were correlated with Ukrainians, whilst 50% of Moldovans had only completed middle school.

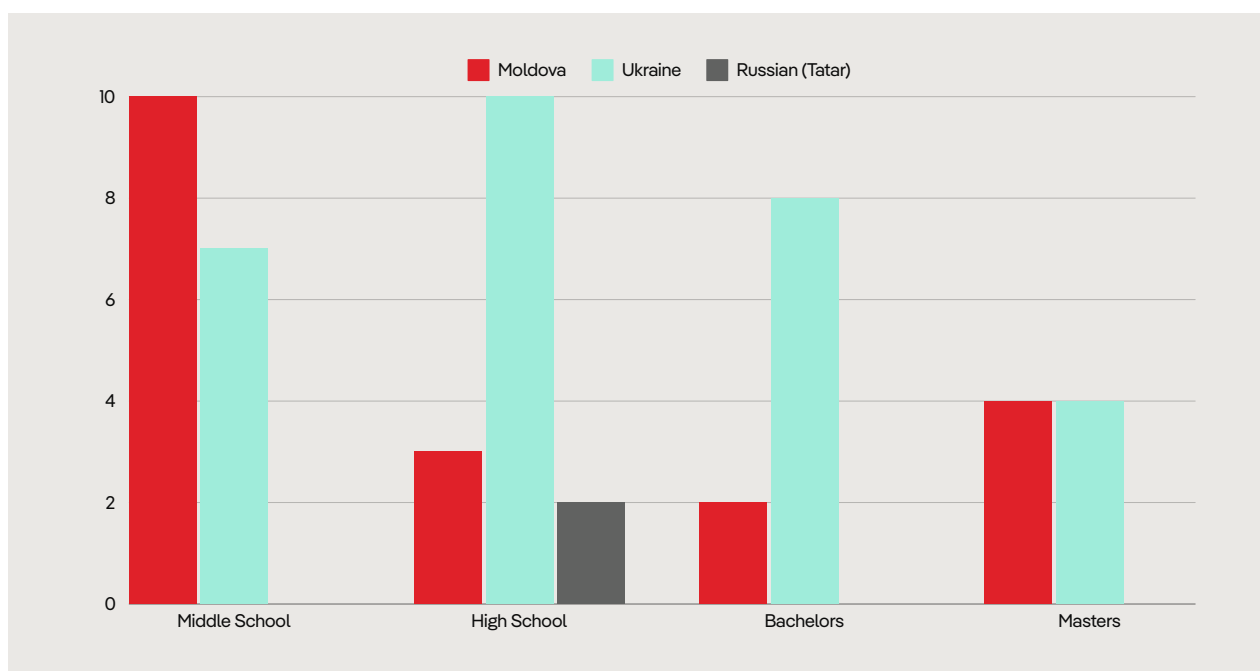
Following discussions between ULIM staff and participants at the beginning of the course, it was found that 70% of participants had not used a computer before which resembled those in the computer labs provided by ULIM.

The course exclusively targeted women. When deciding that the training would be single-gender only, WC and CCF established that this would not exacerbate community tensions since the vast majority of the affected community that both organisations worked with were women.

For Ukrainians, this is in large part due to the prevalence of Ukrainian women in Moldova; border monitoring data shows that 92% of those crossing the border to Moldova from Ukraine are women, due to Ukrainian men remaining in the country due to potential conscription¹⁵. For Moldovans, this was largely driven as a result of CCF's targeted demographic for their core work of social work, that focusses on vulnerable children and caregivers. As the tech hub in Moldova was a small pilot that intended to establish proof of concept in Moldova, the choice was consciously made to work through CCF's pre-existing referral and registration networks. This was also in line with the vulnerability and needs assessment War Child had conducted, that found that women in rural areas were the most vulnerable to labour exploitation, and therefore that the tech hubs could be most impactful in providing an alternate pathway for this demographic. It was also found in risk assessment at the beginning of the course that there was unlikely to be a significant risk of stigmatisation upon women for joining the course, and that the social workers through the internal referral system would be able to manage any risk.

It was decided not to target girls under the age of 18 in recognition of the availability of educational services in Moldova, including for refugees. Since the objective of the tech hub was to provide a door-to-door service culminating in online employment, the partners decided that the curriculum could detract from participants' access to the full course of education in Moldova.

Figure 1: levels of completed education per participant disaggregated by nationality¹⁶



¹⁵ Ukraine Situation – Moldova: REACH – Refugee Monitoring Update (29 March 2022). Last accessed 25th September 2023
<<https://data.unhcr.org/en/documents/details/91812>>

¹⁶ Registration form, June 2023

The course therefore accommodated two quite different demographics: Moldovan participants who tended to have less education, were from rural areas, and therefore had struggled to find a job; and Ukrainian participants who had higher levels of education but struggled to find a job in the Moldovan labour market due to limited childcare and language barriers (participants who identified their country of origin as Russia were too small a dataset to identify such trends).

In KILs, ULIM staff reported that both demographics suffered from low confidence, but that they associated this especially with Moldovan participants (see Section 4.3). There were mothers amongst both demographics. Though the average age of mothers amongst Ukrainian participants was significantly older, these participants did not benefit from the same family support networks for childcare. Despite the different demographic characteristics between Moldovans and Ukrainians, reasons for engaging in the training were quite similar and included improving IT skills, personal development, taking advantage of the opportunities that the tech industry has to offer and keeping up with the modern labour force, learning English, and having an independent source of income. The latter was cited more frequently amongst Ukrainian participants.

2.4 Training curriculum

Based off War Child's key learnings from the DRC pilot, the curriculum consisted of two stages: first providing basic IT skills and English training to ensure that participants were on an even footing, followed by vocational training. The purpose of providing English training was so participants could understand learning and employment platforms even if only to find functions to translate the webpage, and to support their spelling in coding languages.

The vocational skill trained upon was digital annotation. This can be described as the 'human in the loop' of artificial intelligence through integrating human feedback into the AI training process. Participants learned how to assemble a database, populate it with data, and accurately annotate it, to 'teach' the AI model how to identify items. Project partner HITL is specialised in ethical image annotation that ensures that databases include representation of different regions, genders, ages, and ethnicities. Digital annotation was chosen as the vocational skill due to HITL's specialism, high supply of unfilled jobs, and its relative accessibility required in light of the short training period available.

In line with War Child's key learnings from the DRC pilot, the basic IT skills and English training were taught as discrete courses in recognition that some participants may find that these courses were sufficient to meet their goals. This decision was validated by the fact that, in the registration form, some participants listed as motivation for joining the course personal development and learning how to use a computer and hoped to use the digital annotation training to explore one way of making money online, rather than committing to that as a modality of full-time income generation.

3. METHODOLOGY

This case study was written by the WCUK Global Economic Resilience Advisor. The primary data collected included the following:

- 9 interviews with staff members, 3 from each of all three implementing partners of the project (CCF, ULIM, HITL), conducted by the WCUK Global Economic Resilience Advisor in the last 3 weeks of the training
- Focus group discussions held with eight participants, four from Ukraine and four from Moldova, conducted by the WCUK Global Economic Resilience Advisor and simultaneously interpreted by staff members of CCF, in the sixth week of the project
- Baseline survey at registration gathering demographic data, collected for all participants
- Registration lists and attendance data cross-referenced with pass rates, collected for all participants
- Voluntary completion survey evaluating satisfaction with training materials at the end of each module embedded within the HITL training programme
- Voluntary endline survey evaluating impact the training has made on the participants' lives, collected for 19 out of 51 participants
- Feedback sticky-notes board present throughout the course for participants
- Minutes from partner meetings throughout the implementation of the project

Limitations to the methodology were that the surveys integrated into the module materials only gathered data on participants who had finished the module and the endline survey was predominantly filled in by participants who had shown the most engagement in the training. Therefore, data regarding participants who dropped out is predominantly second hand.

Another major limitation was that, due to a shortage of project budget and the desire to garner initial key learnings before designing the second phase of the pilot, a longitudinal study was not conducted on participants' employment prospects post-training. Given that the data for this case study was collected in the final weeks of the training, participants' employment post-training can only be surmised from applications to jobs they made during the training and anecdotal evidence.

Fortunately, all Ukrainian and Moldovan participants spoke Russian. In FGDs with participants, respondents from both nationalities reported that they felt culturally similar to their peers as a result of a shared history in the USSR. Therefore, this project benefitted from unique circumstances in terms of social integration and is unlikely to have key learnings on social integration through the training that could be applied to different contexts.

4. KEY LEARNINGS

4.1 Knowledge acquisition

Key takeaway:

Moldovan participants benefitted more from the training, whilst Ukrainian participants had often higher capacity but more barriers to attendance, resulting in a higher drop-out rate.

The course participants had diverse backgrounds (see Section 2.3). Though a baseline exam was administered in order to place participants in different groups, the exams did not prove an entirely accurate measure of ability as some participants used online resources, and furthermore participants' skills varied considerably within the two groups even after setting. Fortunately, the self-paced materials of the course and the one-to-one support provided by university staff was an effective mitigation strategy, enabling participants to manage their learning at a pace suitable to them. In FGDs, participants did not report that the level of the course had been either too difficult or too easy, and in the anonymous sticky notes feedback provided at the end of each day, the most repeated theme was thanking the ULIM staff for their hands-on support during the self-paced learning.

22 passed all the requisite activities required to complete the English training, 21 completed the IT training, 24 completed the digital annotation training, and 21 completed the work project. As noted above, participants did not have to complete one module to progress to the other; they could choose to focus on the module(s) which they found the most useful and important for them. This decision was taken in light of the fact that some participants had only completed middle school (majority Moldovans), whilst others had completed a masters (majority Ukrainians). Data analysis of pass rates per module disaggregated by nationality supports the assumption that different nationalities prioritised different learning outcomes, as pass rates for Ukrainians in the simpler courses are significantly lower than in the most complex project, namely, the work project, implying that Ukrainians with higher education were most engaged in the courses where they had the most to learn.

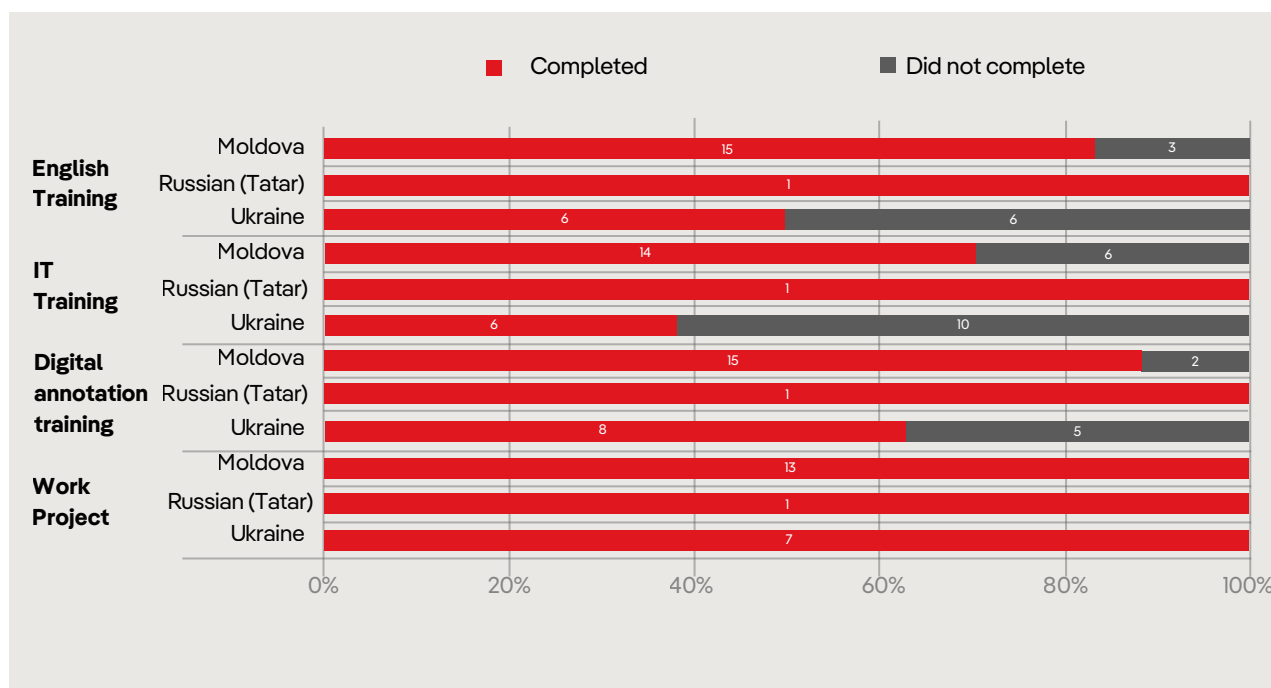
At the end of the course, participants received certificates based on the modules they had sat the test for. Overall, 36 out of 51 participants received a certificate; 15 were Ukrainian (42%), 1 was Tatar and identified Russia as her country of origin, and 20 were Moldovan (56%). Some participants elected to only attend classes without sitting tests, sitting only the activities which they found helpful, and therefore did not receive a certificate but participated in the final ceremony.

Programmatic suggestions:

1. With diverse groups of participants, consider breaking training up into modules and allowing participants to gain certificates for the modules they completed, rather than only upon completion of all modules.
2. Self-paced training combined with mentors can accommodate different paces of study for diverse groups of participants.

3. Internal reporting should be built to capture learning outcomes per module: unlike minors, adults may have more of a background in some of the aspects of the curriculum and may have a stronger idea on what will help them with their career, meaning that they are less inclined to following the programme in its entirety.

Figure 2: pass rates per module disaggregated by nationality¹⁷



4.2 Accessibility

Key takeaway:

Hybrid training is a ‘safety net’ that catches those that otherwise would not have been able to participate, but should not be the default option. It requires careful planning and execution.

Of the 51 participants who engaged in the training, the absolute pass rate for Moldovans was 100% whilst for Ukrainians it was 52%. This is accounted for in large part by the changing migration trends: in Klls, ULIM staff noted that many participants had used the moment of détente in Mikolaiv, Ukraine, where many of the participants were from, to visit family still there, check on their family homes, or return to Ukraine entirely, meaning that they dropped out entirely. In FGDs, some of the Ukrainian participants noted that they had not been able to participate fully in the course since they had returned to Ukraine half-way through, and even if they returned to Moldova in the meantime, it had been a stressful experience and meant that they had withdrawn from day-to-day activities. In Klls, staff also noted Ukrainian participants also had more challenging home lives to manage, including taking care of children at home themselves during the summer holidays since they did not know enough people in the local area to support with childcare, or that they had a greater impetus to find work online or in-person during the course to meet their basic needs.

¹⁷ Registration data cross-referenced with pass rates

This was confirmed by data in the baseline survey which found that many Ukrainians felt their priority need was income. As noted in Section 3, regrettably no primary data collection took place with participants who did drop out, and this remains a major limitation of the study.

A discussion point raised in FGDs with participants was whether the two-month training programme could have been longer or shorter. All participants across all nationalities stated that they liked the compressed nature of the course as it allowed them to concentrate for two months and to fully dedicate themselves to the course.

The training was conducted in Russian. In the registration survey, all participants were asked if they were able to speak Russian and if they felt comfortable speaking Russian¹⁸. 100% of participants responded that they both were able and felt comfortable doing so. To ensure that participants could express their opinions freely on the matter when participants registered, they received a phone call in which they were asked once more whether they felt comfortable speaking Russian and whether they would like to request a language-based accommodation. No participants requested such an accommodation.

Human interest story: 'I'm Ukrainian and have a three-year-old child. Even though my family has been really supportive of me doing the course and pursuing further education, most of the household tasks still fall on me. I am provided with a free nursery place for my son but the activities in the nursery start quite late and end early which means I can't find a job. Therefore I really appreciate learning a digital skill, and being able to learn it online, because it means that I can look after my child at the same time.'

4.2.1 Hybrid training provision

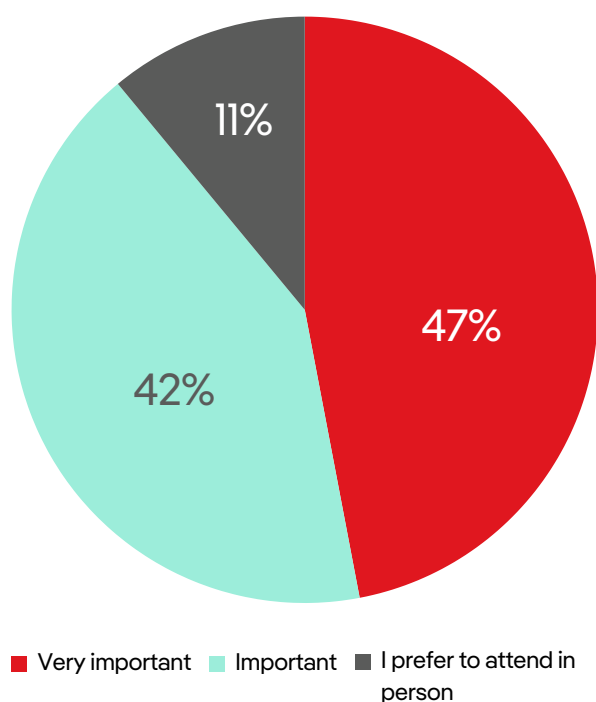
The tech hub training was delivered in a hybrid modality. This meant that participants were invited to join the course in-person on Tuesdays and Wednesdays to receive hands-on support from the university staff. However, if participants were unable to join on a Tuesday or Wednesday they could join online and access the support of ULIM staff that way.

All participants who wanted to attend the course in-person but lived too far away were able to access accommodation and a travel stipend through the course, covered through project funding. Therefore, hybrid and/or online training was mostly used as a modality by participants who had children rather than participants who lived far away or had a part-time job. Participants with children were also able to bring their children to the university during the day to make use of childcare through the volunteers vetted by the university, although the children would not be able to stay overnight, therefore meaning that women with children hoping to access the childcare provided by the university could not also take advantage of the free accommodation provided. Only one woman made use of this childcare.

In both surveys and focus group discussions, participants showed a strong preference for the hybrid modality, even if they did not take advantage of it themselves. Respondents to the endline survey cited in a free-form survey question regarding the hybrid modality that 'it is much more convenient to have online classes because we can fit them in with everyday activities'; not all participants have the

¹⁸ Since Moldova and Ukraine were both part of the USSR, most Moldovans and Ukrainians speak Russian, some even as a native language.

Figure 3: How important was it for you that you could attend online?¹⁹



opportunity to attend the training in person for various reasons, and therefore, in order not to miss training, the option of online training is convenient'; 'it is very convenient to work and study online because I have small children'; 'it's convenient because you don't waste time en route'.

Two respondents in the endline survey noted that they preferred attending in-person since it enabled them to understand the content better. In FGDs, two girls who attended only in-person noted that they found the hybrid modality disruptive at times as the participants attending online would struggle to follow and therefore ask questions. This notwithstanding, they noted that it was crucial for accessibility for participants with young children could attend and felt that even though they were personally inconvenienced by it, they felt that it was an important aspect of the course.

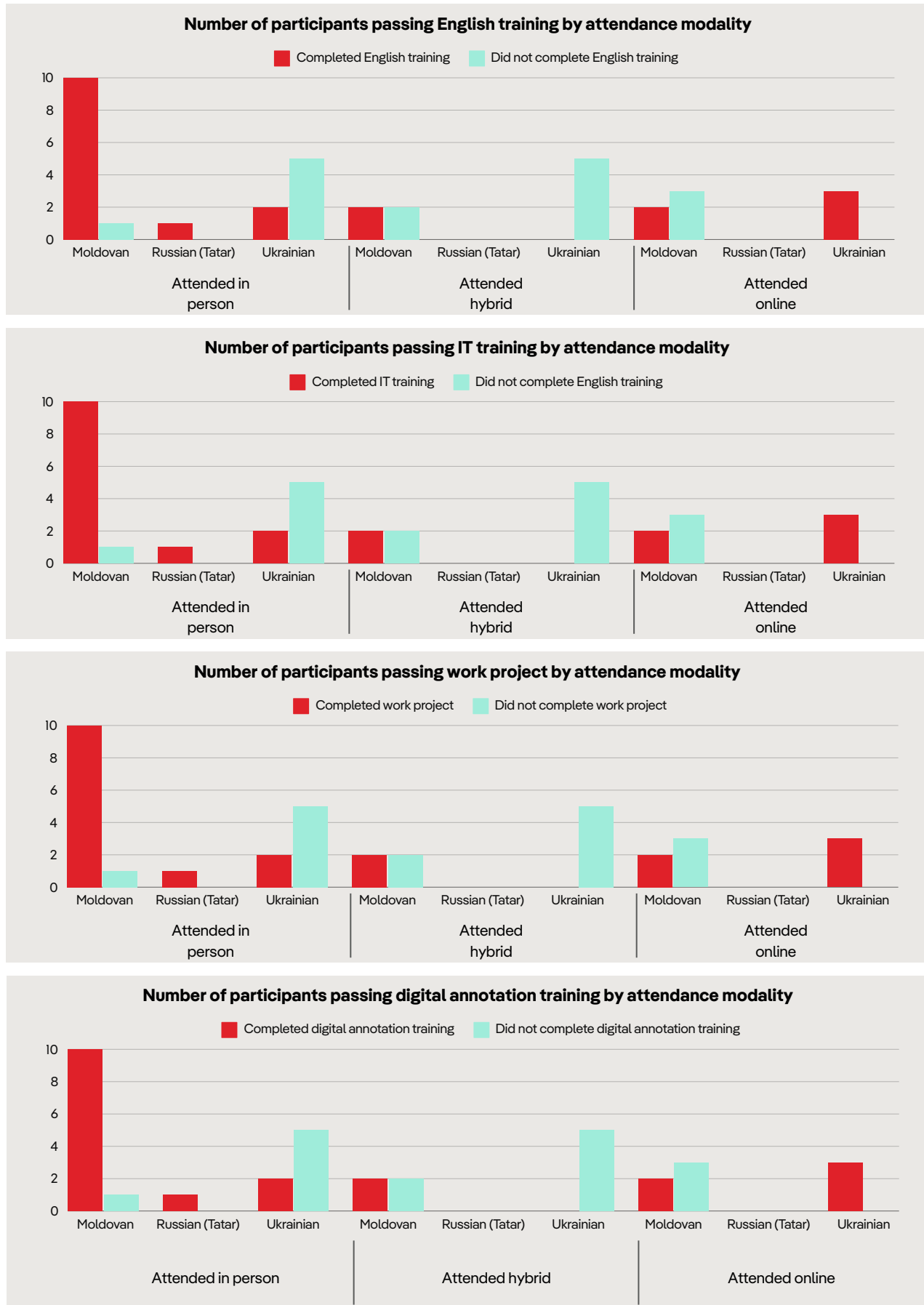
Amongst both participants and all three partners, in-person attendance was perceived as the best option for knowledge acquisition. Interestingly, data analysis of pass rates (see Figure 4) shows that this assumption holds true for Moldovans only, perhaps implying that for Ukrainian and other displaced participants, other barriers may have prevented in-person attendance, and that for many, the only opportunity for them to attend was through an online modality.

Indeed, KIIs from the three partners in the project implied that the link between those attending online and then dropping out was likely a matter of correlation rather than causation. The understanding was that participants who were prevented from engaging fully in the course were more likely to attend online and therefore were more likely to drop out. However, all informants found that the online option was a helpful safety net to ensure that participants could still attend even if they had accessibility concerns and noted that some participants had improved significantly even when attending entirely online. A third of participants who finished the work project successfully had attended the course entirely online, showing that knowledge acquisition is still possible with entirely online attendance.

In KIIs with the ULIM staff, logistical issues were raised in regard to the hybrid modality. They noted that it was challenging to establish when participants would come in-person or online, and that when many participants are online, it was hard for them to divide their time to ensure that they could provide hands-on support to those online as well as those in-person. However, they were aware that many participants struggled to plan ahead due to domestic responsibilities and also did not think that participants should have to 'book in' their attendance online or in-person. Instead, they suggested dedicated online staff.

¹⁹ Endline survey, August 2023

Figure 4: Pass rates disaggregated by attendance modality²⁰



²⁰ Attendance data cross-referenced with pass rates

Programmatic suggestions:

1. Conscious consideration of barriers posed for different demographics should be integrated into the early design, ideally through FGDs or other forms of community consultation before the curriculum and training design is completed. For example, in this pilot, availability of ULIM was limited to the summer holidays, but in future courses could be scheduled specifically at times where women had guaranteed access to childcare.
2. Where budget allows, consider providing a stipend throughout the training to allow participants to concentrate fully on the training, and to maximise in-person attendance, continue to offer a stipend for accommodation and travel for those who live far away from the training site
3. Continue to offer an online and/or hybrid option in reflection of the fact that participants may struggle to attend entirely in-person, and an online or hybrid option may enable the most vulnerable participants to continue the training; in the community consultation stage, ensure that participants know that in-person attendance is the most suited to knowledge acquisition, though online attendance can still generate good results (one third of those who passed the work project had attended mostly online)
4. Ensure that simultaneous attendance online and in-person is reflected in the staffing.

4.3 Self-confidence

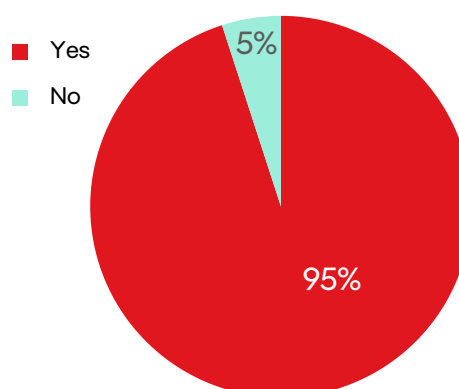
Key takeaway:

Vocational training in particular built participants' confidence, especially through association with higher education and/or STEM

An unexpected outcome of the tech hub was that participants' self-confidence improved specifically as a result of association with a tertiary education institute (ULIM) and with a STEM subject. In a KII with one of the university staff members, it was pointed out that most of the participants associated tech with a 'male' skill that is difficult and technical. Accordingly, the satisfaction surveys embedded in each module show an increase in self-confidence associated in particular with the vocational skill rather than English (see Figure 6).

It seems also that female-only targeting of the course contributed to participants' self-confidence. Most women in the endline survey expressed their satisfaction with the course being women-only. In the free-form response box where respondents could explain their answer, 7 noted that they felt safer and more comfortable whilst learning.

Figure 5: Did you appreciate the course being women only?²¹



²¹ Endline survey, August 2023

Interestingly, in the endline survey, respondents discussed that the course helped them to identify with values such as 'I believe that we women are not at all lower than men'; 'it is very good for a woman to have an individual income and be independent'. In FGDs, two participants raised that this was one of their first encounters with feminism and that the course, being women only, had familiarised them with the idea that they can be financially independent and have a job. In KIs with partner staff, it was suggested that this outcome may have also been influenced by the fact that, with the exception of one university volunteer, all personnel working on the training from all four partner organisations were women.

In terms of association with women's belief in themselves and self-confidence, however, it seems the course alone was not sufficient in changing stereotyped opinions about women's role in society. ULIM staff noted that a number of the women held stereotyped roles about the role of women and men in society and did not identify with the identity of working women in society. They noted that such participants had not decided to continue onto vocational skills, and rather only worked on the modules that they felt contributed to personal development. Furthermore, ULIM staff noted that in some communities, due to high unemployment, women's employment could be stigmatised as it could be understood as emasculating for men in their society by 'taking away' their jobs.

'This course helps women's self-esteem and mental health because it's so measurable in the short term. You don't need to wait three to five years to find a job opportunity afterwards. Within two months you find that you are able to master a 'high tech' skill.' Dean of Social Services, ULIM

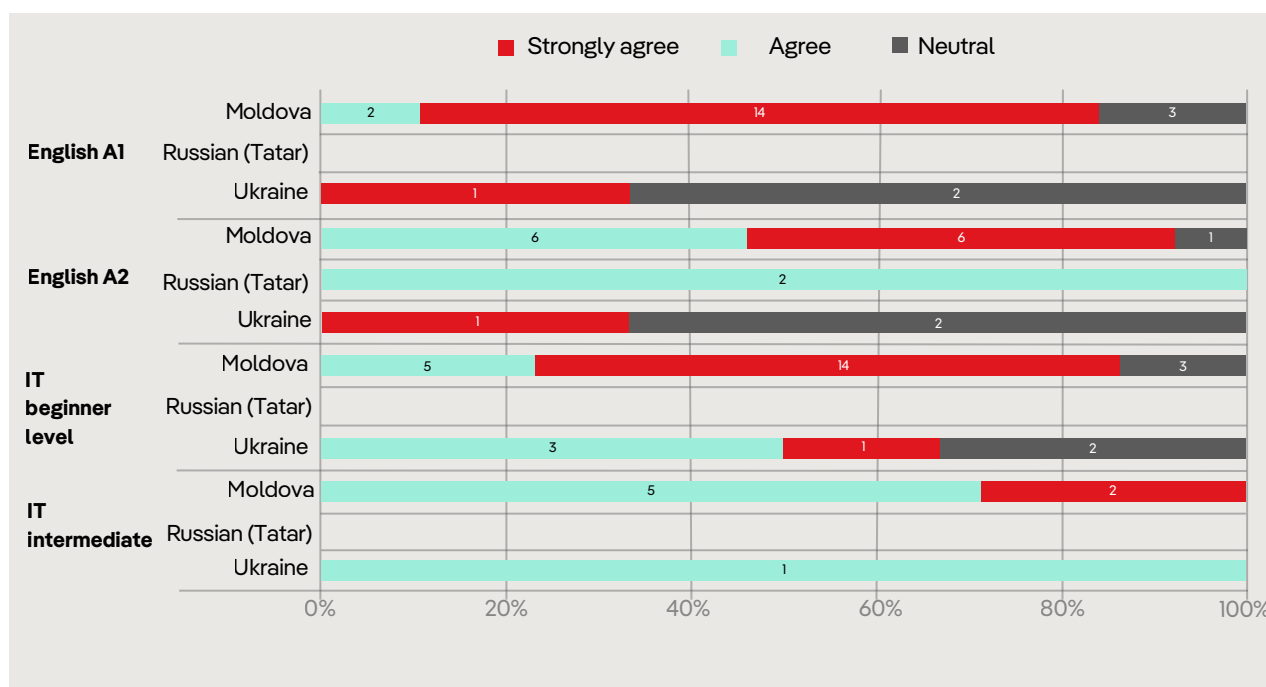
In conversation with ULIM and CCF staff who had observed the training, they noted that the participants had felt that they were engaging in a serious endeavour by virtue of taking the course at ULIM. Although this had not been planned, they reflected in retrospect that housing the course at a refugee accommodation centre might not have proven a positive experience for the participants, especially in light of the fact that many of the refugee accommodation centres have a 'depressing' atmosphere due to the fact that most residents are there in limbo. Staff from both project partners also found that participants had derived more self-confidence through mastery of hard skills, compared to generic self-esteem trainings they had given in other projects, which they found to be much more abstract and vague. ULIM staff also commented that the fact that participants could go on to paid employment from HITL had substantially increased their self-confidence as it demonstrated to them their competencies through an 'objective' measure, namely the ability to earn money.

ULIM and CCF staff also noted that the participants' overall well-being had improved as a result of forming new friendships. They were able to identify participants who were socialising with other participants that they had only recently met, including amongst Moldovans and Ukrainians. Two thirds of Ukrainians noted that it was easy or very easy for them to make friends with Moldovans; those who said that they did not make any new friends attributed it to either being not social or that they were older than other participants. Meanwhile, 10 (77%) of Moldovan participants said it was easy or very easy to make friends with Ukrainian participants, with those reporting that they only made a few friends or not many citing that they spoke Russian poorly and that they didn't have time.

As noted in Section 3, a major limitation of this case study is that data was not collected from participants who dropped out of the course. A ULIM and CCF staff, however, felt that self-confidence

was a major reason for participants not completing aspects of the course, or individuals eligible for the training not registering at all. A member of CCF staff noted that when potential participants were asked to fill in the baseline exam and to provide an email, they in undertaking these two tasks was overwhelming and therefore they elected not to join the training, despite reassurances that they would receive hands-on support and that there was required level of knowledge to join. A member of ULIM staff suggested that an orientation session held in-person could in future reassure participants that they would be eligible for the course, and that it might prove more personal and therefore convincing than written materials.

Figure 6: Did the training help your self-confidence?²²



Programmatic suggestions:

1. Low self-confidence and stereotyped ideas about women’s role in society hinder the inclusion of the most vulnerable women in the course. Community engagement is crucial to counter this, ideally through complementary programming or at a minimum through dedicated social work and/or MHPSS components integrated into the training as additional modules. Information provision should be delivered in a way that is accessible to potential participants and is not conceived of as intimidating or exclusionary, which could include an ‘orientation session’ for participants who are not as familiar with tech.
2. Self-confidence seems to be most positively impacted through training on ‘hard skills’ and/or vocational training in male-dominated sectors, with the proviso that women have not been put off from attending altogether. When combined with community engagement, this training could have a strong impact on self-confidence.
3. Consider female-only courses when specifically addressing women’s self-confidence. Such programmatic decisions can be validated in community engagement, especially where there is a risk that this could lead to further marginalisation or stigmatisation of women.

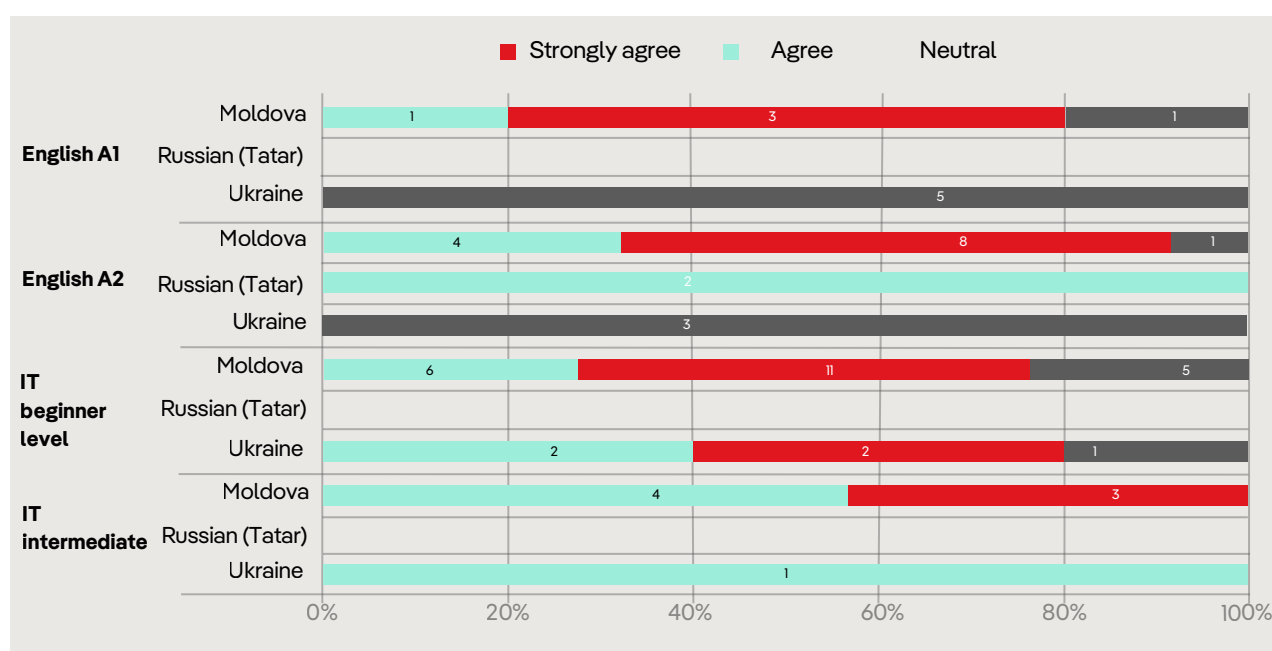
²² Voluntary completion survey evaluating satisfaction with training materials at the end of each module embedded within the HITL training programme, July – August 2023

4.4 Employment prospects

As noted in Section 3, due to a shortage of budget, and the need to establish key learnings before planning the second phase of the project, a longitudinal study on participants' employment prospects has not yet been carried out.

However, there is some anecdotal evidence that indicates that the course had improved the participants' prospects. The ULIM Dean of Social Services noted that one participant had reached out to ULIM staff to ask for support in developing her CV. Following this, the Dean was contacted by an employer asking ULIM to confirm the participant's participation in the training for the purposes of a reference check for a job. Meanwhile, another participant who had previously dropped out of further study and had not worked or studied for several years had since applied to a clerking job at the Ministry of Social Protection which she was now eligible for due to passing the basic IT and English courses. Another participant had applied for work in a child daycare centre and was looking to resume further study after a six-year break due to mental health problems.

Figure 7: Did the training help you improve your job readiness?²³



In FGDs, participants noted that they had learned valuable skills that would help them in jobs overall. Participants noted that before the training, they had not learnt English or IT apart from extremely simple classes at school, and furthermore that the devices they used at school had changed so much that they no longer recognised modern hardware.

In both FGDs and KIs, participants and staff noted that they had underestimated the importance of seemingly simple administrative tasks. For example, knowing how to reset the password to an email or understand what to do when their email storage was full meant that participants could rely on email to reach potential employers. Furthermore, staff noted that the vast majority of participants had not written a CV before.

Implementing partner staff found that the main impetus for participants had been the combination of their improved self-esteem, their affiliation with a university (even if they were not formally enrolled)

²³ Voluntary completion survey evaluating satisfaction with training materials at the end of each module embedded within the HITL training programme, July – August 2023

and acquiring of 'hard' skills that would impress employers, even if those skills would not be used in the job that they were applying for. Though it seems from the anecdotes listed above that participants had capitalised off the training for jobs outside of digital annotation thus far, it seems that participants felt the most ready after the more technical skills (see Figure 7). This corroborates the finding that affiliation with a 'hard' skill supported participants in feeling more ready for the employment sector, perhaps through the prestige of the skill as well as through raising their self-confidence. The fact that more participants may not have sought out digital annotation training during the early stages of the course may also be as a result of already being in contact with HITL and therefore waiting for the job placement at the end of the training; 100% of participants (15 out of 15) who finished the end-of-module survey following the digital annotation training requested further job placements and training opportunities on digital annotation.

4.5 Consortium design

In discussions with all four partners of the consortium, one of the major advantages noted was that the design of the consortium that leveraged the comparative advantages of national NGOs (CCF) international NGOs (WC), higher education institutions (ULIM), and social enterprises (HITL).

From the perspective of NGO partners, partnering with a social enterprise like HITL afforded several key advantages, namely:

- Due to social enterprises' different funding model, which is independent of donors and grant-giving and therefore is self-funded, this means that WC and CCF can 'graduate' participants on to HITL if WC and CCF have a pause before finding future funding. Because social enterprises are not dependent on a donor pipeline, this means the consortium as a whole can provide a long-term training and employment offering to participants by leveraging the contribution of different partners at different times.
- Since social enterprises that work to create a supply of employees for a certain sector have an incentive to train and hire such employees, this means that NGO partners can refer participants to a genuine market linkage. The NGO partners reflected that other livelihoods projects often provide participants with a market linkage with the sole goal being exposure to the market for participants, since the employer is unlikely to hire the participant afterwards.
- Social enterprises are reliant on their own profit, and therefore, to continue to make social impact they must be commercially viable. Meanwhile, humanitarian organisations do not take into consideration commercial viability. Therefore, where a participant is struggling significantly, a humanitarian organisation would see it as within their mandate to support that participant first, in line with the humanitarian principle of impartiality that is understood to mean "helping the furthest behind first". By contrast, a social enterprise might see that participant as being a poor return on investment and that they might be able to help more participants with the investment put into their training. We found that in this project, it was impactful to combine donor funds (that allowed humanitarian organisations to operate without commercial viability considerations) complemented by the social enterprise's different financial model.

Furthermore, from the perspective of the NGO partners, operating with a private university was a surprise addition to the project that was much appreciated. ULIM had an incentive to partner with the consortium as part of their corporate social responsibility commitment, and also to raise visibility of their university. This is especially the case in countries like Moldova where many students choose to study abroad, and therefore local universities have greater incentive to compete.

In the discussion for the case study, the partners also reflected on how best to improve consortium design and management in future. This included the following reflections:

- The flipside of commercial viability is that there can be a clash in our participant targets between humanitarian organisations and social enterprises. Whilst a social enterprise might be happy to wait until the training is completed to confirm those who can progress to a job placement, a humanitarian organisation would take into consideration Do No Harm elements and would take steps to ensure that expectations are not unnecessarily raised, such as through guaranteeing a job placement or even paying participants a stipend through a 'mock-up project' to ensure that some participants are not penalised by not receiving the full extent of the training. The partners thought that these aspects could be discussed more extensively in the inception period.

5. OPPORTUNITIES FOR COMPLEMENTARY PROGRAMMING

Limited budget naturally entails compromise in programmatic decision-making. The following examples of complementary programming are complementary activities that could have been conducted within the scope of this project.

Considerations for future programmes in Moldova and other high- or middle-income settings

5.1 Online labour market assessment

Due to WCUK's pre-existing MoU with HITL on the global level, HITL's interest in contracting participants post-training, and a shortage of budget, War Child did not conduct a full-scale online labour market assessment to assess where the majority of employment opportunities exist. However, in KIs at the end of the training, though the ULIM staff were confident that participants would be able to successfully undertake a digital annotation project contracted by HITL, they noted that the pace of change of tech meant that participants would be more likely to derive a good salary through a diversified portfolio of skills. As such, in future iterations of the pilot, it is suggested that a full-scale online labour market assessment is conducted in the inception phase to guide what skills are trained upon.

Since this pilot was designed, there has been considerable discussion in the international community regarding the ethics surrounding artificial intelligence. HITL has consciously addressed these concerns in their foundation through bringing humans 'into the loop' to ensure that datasets that form the basis of artificial intelligence reflect the diversity of human experience²⁴, and HITL provided expert advice to the consortium on this topic. Given the pace of change in this area, future online labour market assessments could address the ethics surrounding new sectors in tech.

5.2 Safe use of the internet training

Since all of the training materials and the work project was provided by HITL, and that CCF has an ongoing relationship with the participants as part of their social work offering, War Child due to budgetary constraints decided to forego a specific 'safe use of the internet' training. However, where the project is replicated in another setting – and especially where participants are not referred from a pre-existing social work caseload where there is a long-term relationship established – it is suggested that this training is created as an integral part of the course. This could include components regarding data privacy, risks of fraud, risk of labour trafficking online, and exposure to potentially traumatic materials.

²⁴ <https://www.media.mit.edu/articles/artificial-intelligence-has-a-problem-with-gender-and-racial-bias-here-s-how-to-solve-it/>

5.3 Domestic labour law training

HITL's current practice is to subcontract participants of the course through a partner organisation. However, a major objective of the tech hub is to allow participants to gain an independent income online through flexible freelance and/or full-time opportunities. In this regard, domestic labour law training would be necessary to inform participants of their obligations (especially tax-related) and labour rights. This was omitted from the pilot as it was not expected that participants would have acquired the requisite skills to graduate to independent freelance work immediately, and instead would find work through HITL. However, in future phases of the same pilot, this would be an integral activity.

5.4 Employment mentorship

A self-paced micro-freelancing course was made available to participants during the entirety of the training which supported participants to put in place the preconditions for employment online, such as creating a digital CV, an email, and navigating job boards. However, given the low self-confidence of many participants (see Section 4.3), it was determined that one-to-one employment mentorship would support participants to overcome any psychosocial barriers and to receive support for any unexpected gaps in knowledge.

Furthermore, in the Moldovan context and unlike the DRC pilot, in which participants' only other option for livelihoods was mining, full-time, salaried employment with a contract and other employment-related benefits like healthcare and maternity leave, is very much possible for participants. Therefore, mentorship could support participants to find such employment opportunities and graduate them from shorter-term contracts as they build their confidence and work experience.

5.5 Psychosocial support and/or social work

The participants' poor mental health and lack of self-confidence were unexpected challenges in this pilot. In parallel, the consortium did not anticipate that elements of the pilot such as forging new friendships and association with a hard skill and/or a higher education institution would contribute to participants' mental health in a noticeable fashion. As such, future pilots could explicitly integrate MHPSS into the project, either through integrating the pilot into an existing MHPSS programme, through referrals, or to providing a social work and/or psychosocial support component as a component of the training package. Ideally, this should be preceded by a detailed assessment conducted by an MHPSS specialist that could tease out interlinkages between PSS activities and the improvement in self-confidence derived from participation in the programme as a whole.

Considerations for pilots in low-income settings

5.6 Digital inclusion

As noted in Section 1, a key objective of the tech hub approach is digital inclusion through providing electricity and internet in 'digital deserts'. This was not a consideration in the Moldova pilot since all participants had access to internet or electricity either through RACs or local services. However, in

low-income settings, a digital inclusion component could ensure the existence of electricity or internet, as well as different demographics' access to these services. This could fruitfully be guided by an operational study that identifies whether digital inclusion is best created through provision of electricity and internet that the community can manage independently (for example, as established in the pilot in DRC alongside FiftyEight, where participants were provided with solar panels, batteries, and a V-Sat) or whether as part of a larger consortium considering digital inclusion as a whole.

5.7 Financial inclusion

Thanks to favourable domestic legislation in Moldova, Ukrainian participants were able to access financial institutions in Moldova. Furthermore, 100% of Moldovan participants either had pre-existing access to a financial institution or had been supported by CCF in the past to access one. However, in low-income and/or rural settings which are predominantly cash-based economies, financial inclusion will be a core component to ensuring success of the project. Where participants live a significant distance away from a financial institution, this might challenge the objective of the project by rendering freelancing much less viable as participants would not be able to access their funds online. Rather, new formats could be explored, for example through establishing a cooperative which distributes funds amongst its members. This would need to be substantially risk assessed to ensure that this would not expose participants to tensions amongst themselves or to extortion. Furthermore, any linkages to a financial institution would have to be carefully planned to ensure that they are accessible to all groups. Financial inclusion assessments therefore are suggested in advance of any such project.

Dunn's Hat Factory, 106-110 Kentish Town Road, London, NW1 9PX
Registered charity number: 1071659

For more information please contact Tiara Sahar Ataii at
TiaraA@warchild.org.uk



Humans
in the Loop



Women's Peace &
Humanitarian Fund
A United Nations & Civil Society Partnership