



# UNITAR STRATEGIC RESPONSE TO COVID-19 CRISIS



EMPOWERING THE  
SAHEL REGION  
THROUGH DIGITAL  
RESKILLING AND  
UPSKILLING TO  
ENHANCE PRODUCTIVE  
SOURCES OF  
LIVELIHOOD AND  
EMPLOYMENT

PROJECT  
COMPLETION  
REPORT  
2022



**UNITAR Strategic Response to COVID-19 Crisis:  
Empowering the Sahel Region through Digital Reskilling and  
Upskilling to Enhance Productive Sources of Livelihood and  
Employment  
2021 Cycle  
Project Completion Report**

Information, examples and answers to your questions about the topics covered here can be found on our website, [www.unitar.org](http://www.unitar.org).

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# About Us

United Nations Institute for Training and Research, UNITAR, established in 1963, is the dedicated adult-learning training arm of the United Nations. We deliver innovative learning solutions to individuals, organizations and institutions to enhance decision-making and support action towards a better future.

The Division for Prosperity is one of the eight divisions of UNITAR and consists of the Public Finance and Trade Programme Unit and the Hiroshima Office. Driven to “leave no one behind,” we provide creative, cutting-edge learning solutions to promote inclusive and sustainable economic growth. We strive to reach society’s most vulnerable, including women, youth, and those in conflict situations. Our clients are individuals and institutions in least developed countries, small island developing states, and conflict and post-conflict countries.

With staff in Geneva and Hiroshima, as well as field staff across the world, our reach is global, allowing us to deliver critical training and support to learners from more than 90 countries.

On behalf of the Division, I thank you for your support for our work and vital mission. Working together, we can make meaningful progress in building the next generation of changemakers and move closer to eradicating poverty and reducing inequalities for a sustainable, inclusive and prosperous future for all.



A handwritten signature in black ink, appearing to read 'Mihoko Kumamoto'.

*Mihoko Kumamoto*

**DIRECTOR**

UNITAR, Division for Prosperity



# Executive Summary

The Sahel is plagued by insecurity and is one of the most vulnerable regions in the world. Given the region's porous borders, political instability or a security crisis in one country often poses a serious threat to its neighbours. The surge in armed violence in the past year across Burkina Faso, Mali and Niger is having a devastating impact on the socioeconomic development of the region and exacerbating precarious conditions, including food insecurity and unemployment.

The unprecedented global health crisis caused by the COVID-19 pandemic is disrupting the lives of hundreds of thousands of people with devastating socioeconomic impacts. It is disproportionately affecting fragile and conflict countries that are already battling high poverty, political instability, weak states, and poor infrastructure.

## Programme Summary

The United Nations Institute for Training and Research (UNITAR) sought to empower people in the Sahel to take advantage of the 4th Industrial Revolution (4IR) and address the pandemic-exacerbated challenges in their communities. UNITAR and its partners ran the 2021 cycle of **Strategic Response to COVID-19 Crisis: Empowering the Sahel Region through Digital Reskilling and Upskilling to Enhance Productive Sources of Livelihood and Employment**.

Open to women and youth from Sahelian countries (Burkina Faso, Cameroon, Chad, Guinea, Mali, Mauritania, Niger, and Senegal), the programme sought to empower motivated professionals, students, and entrepreneurs, especially women and youth from the more marginalized communities, and to digitally upskill or reskill them. With key relevant knowledge and skills, they would be able to win stronger economic prosperity for their families and communities.





The programme paid particular attention to helping participants put what they learned into practice and aimed at creating a balance of theory and practice. It trained participants on digital literacy, application development, data, programming and coding, and artificial intelligence and cybersecurity.

The programme was supported by the Government and the People of Japan. It was delivered fully online due to challenges of the ongoing COVID-19 pandemic.

## 2021 Cycle Participants

A total of 1,001 participants joined the 2021 cycle, of whom 552 obtained certification.

<b>Cohort 1 (Total: 501)</b>		<b>Cohort 2 (Total: 500)</b>	
<b>Country</b>	<b>No. of Participants</b>	<b>Country</b>	<b>No. of Participants</b>
Burkina Faso	91	Burkina Faso	78
Cameroon	133	Cameroon	106
Chad	34	Chad	43
Guinea	19	Guinea	17
Mali	132	Mali	133
Mauritania	6	Mauritania	8
Niger	46	Niger	53
Senegal	40	Senegal	62

## Programme Structure

The programme was divided into three training phases:

Phase 1 – Fostering Digital Literacy and Inclusion

Phase 2 - Sahel Digital Transformation: Peace & Prosperity Hackathon

Phase 3 – Sustaining & Scaling Digital Innovation: Training of Trainers & Virtual Conference

Over six months, participants learned through a combination of on-demand e-learning courses, e-workshops, live webinars with experts, a hackathon, a virtual conference, readings and exercises, and assignments.



Participants learned through asynchronous and self-paced online modules, peer-to-peer discussions, assignments, mentoring and coaching, and live webinars by subject matter experts. The two-day in-person workshop in phase 3 included a business operationalisation hackathon and individual pitch deck development and presentation. Local, national and international experts and organisations were engaged in each phase to ensure the relevance and usefulness of the programme.

“ I am much more armed with knowledge on gender equality, equity, the SDGs, and the empowerment of women and young girls [to be] taken into account by new technologies of artificial intelligence.

*Kenfack Anafack Alex Bruno*

## Outcomes

Ninety-nine per cent of the participants rated the programme as useful overall. Ninety-seven per cent indicated that the content was relevant to their professional roles, while 80% indicated they were exposed to new information, with 99% of the participants expressing their intent to use their new knowledge.

The programme significantly increased the participants' knowledge. More than 97% indicated that their knowledge levels increased on youth entrepreneurship as a solution for sustainable development, while 95% indicated their knowledge on application development had increased. Overall, 97% indicated an increase in their knowledge on cybersecurity.

## Lessons Learned

The programme showed that **building women's capacity and knowledge on 4IR by providing digital upskilling/reskilling is of great relevance** and UNITAR should continue working in this area. Many participants put their knowledge to use in response to the COVID-19 outbreak, which is creating major public health issues and raising the urgency for financial empowerment.





### Interest in the course has grown

**exponentially.** The programme's appeal lies in the cross-cutting nature between digital literacy, digital upskilling, and developing a sense of confidence in adapting digital solutions to the problems participants face in their communities and regions. Announcing the programme through social media and by word of mouth led to UNITAR receiving more than 1,400 applications. Participants who joined the 2021 cycle expressed interest in continuing the programme and having more cohorts in the coming years. Expanding the course or creating new content catering to other regions will require us to explore new funding modalities or donor partnerships.

The diversity of partnerships and contributors significantly enriched the content of the course. **We included Sahel-focused content and had experts from across Sahelian countries and the globe share their knowledge** in our webinars.

**Artificial intelligence and app development are of great interest to the participants,** especially to youth and women who are looking to start or have initiated their small businesses. The lessons on artificial intelligence, especially the focus on rights and duties and relevant case studies, were well received by the participants.

**Technical and connectivity fragility, including the cost of internet, continues to be a challenge** where some participants were located. While EdApp as a mobile-first platform with offline access was appreciated as a learning tool, UNITAR should, wherever possible, further develop easy and lower-bandwidth materials and tools. Participants mentioned their preference for in-person training throughout the course; however, the online modality – started in 2020 – has significantly increased the total number of learners UNITAR reached.



The UNITAR programme was amazing. Apart from getting insight into gender issues, I learned new digital skills that I've been employing in my work. I discovered the Khan Academy through this programme and I've not stopped taking their free course even after the training. EdApp was a very user-friendly platform that made learning easy and interesting.

*Fuanyi Awatboh*





# Programme Summary

## Programme Background

The Sahel is plagued by insecurity and is one of the most vulnerable regions in the world. Given the region's porous borders, political instability or a security crisis in one country often poses a serious threat to its neighbours. The surge in armed violence in the past year across Burkina Faso, Mali and Niger is having a devastating impact on the socioeconomic development of the region and exacerbating precarious conditions, including food insecurity and unemployment.

The emergence of COVID-19 has triggered yet another layer of crisis upon an already dire humanitarian situation. The unprecedented global health crisis is disrupting the lives of hundreds of thousands of people with devastating socioeconomic impacts. It is disproportionately affecting fragile and conflict countries that are already battling high poverty, political instability, weak states, and poor infrastructure.

The pandemic is also accelerating radical shifts over the past few years in employment and income opportunities in tourism, health care, and technology. The shifts highlight the urgent need for upskilling and reskilling, especially in digital skills, so more people can take advantage of new opportunities from the so-called 4th Industrial Revolution (4IR).

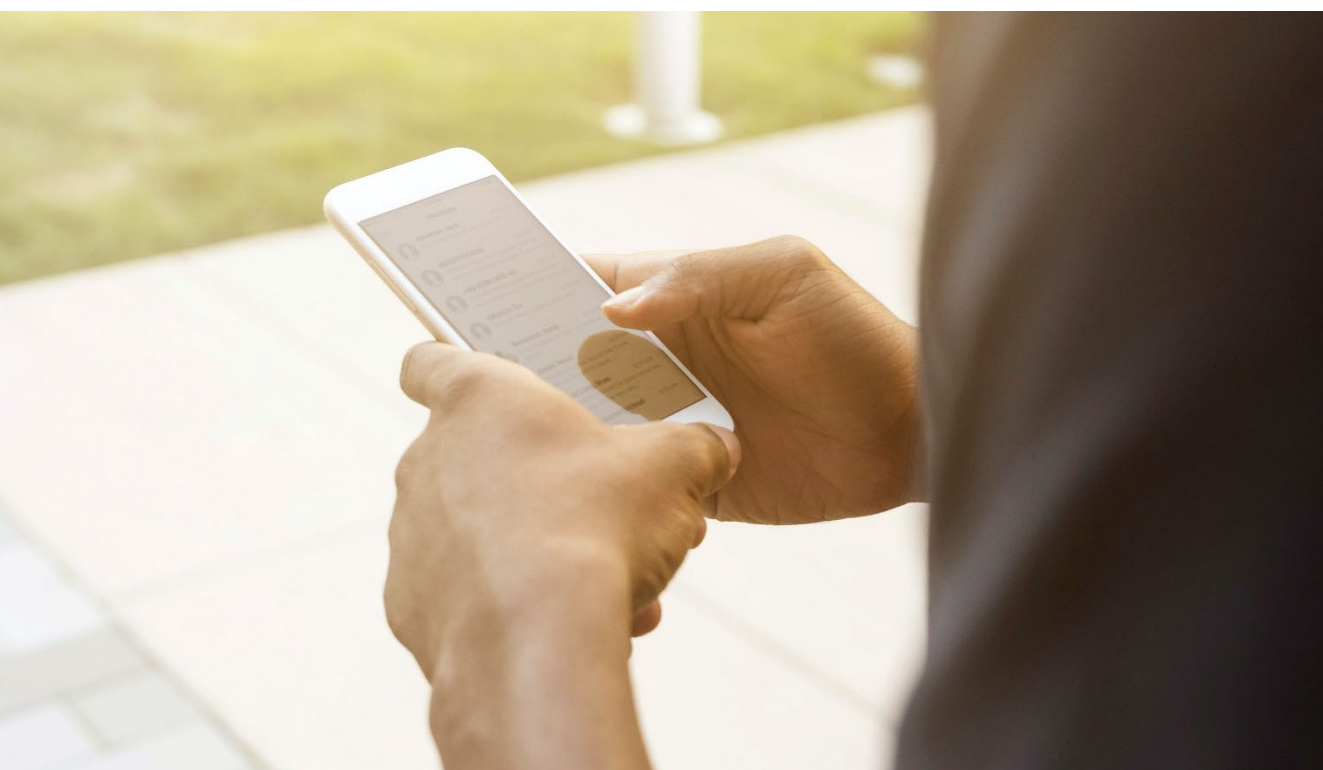
To address these needs, the United Nations Institute for Training and Research (UNITAR) and its partners ran the 2021 cycle of **Strategic Response to COVID-19 Crisis: Empowering the Sahel Region through Digital Reskilling and Upskilling to Enhance Productive Sources of Livelihood and Employment.**

The programme was developed with the full financial support of the Government and the People of Japan. The 2021 cycle consisted of three phases, training a total of 1,001 participants in the Sahel region.



### 1,000+

learners from the Sahel have joined the programme since its creation







## Programme Objectives

The programme aimed to digitally reskill/upskill beneficiaries in the Sahel. However with high applications received for each cohort, more were included in the programme than anticipated. It sought to empower motivated professionals, students, and entrepreneurs, especially women and youth from the more marginalized communities, and to digitally upskill or reskill them. With key relevant knowledge and skills, they would be able to win stronger economic prosperity for their families and communities.

Over three phases, participants progressively learned how to practically apply knowledge, skills, and attitudes to sustain and scale their digital initiatives to enhance their sources for livelihood and employment.

## 2021 Cycle Participants

A total of 1,001 participants (over the 550 initially targeted participants) joined in two cohorts between October and March 2022. Of the total, 552 obtained certification<sup>1</sup>.

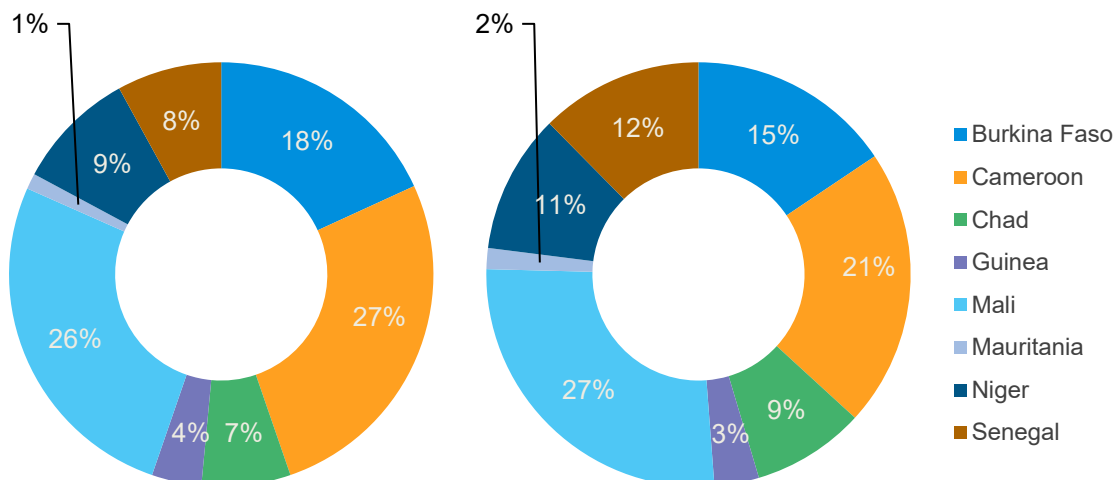
The programme was open to women and youth from Sahelian countries (Burkina Faso, Cameroon, Chad, Guinea, Mali, Mauritania, Niger, and Senegal). The participants were from the following countries:



The UNITAR programme is excellent. My participation allowed me to take control of the digital tools that make my daily life easier. Knowledge of the 17 Sustainable Development Goals helps me carry out actions to make the world around me a better place.

*Djimoyel  
Allahndigta  
Mardochée*

**Figure 1: Country distribution (Cohort 1 and Cohort 2)**



<sup>1</sup> Participants were awarded with programme certificates upon completion of all EdApp courses and successful submission of the final assignment.



# Programme Structure and Methodology

## *Programme Structure Overview*

The programme took place over 12 months and incorporated three training phases:

Phase 1 – Fostering Digital Literacy and Inclusion

Phase 2 – Sahel Digital Transformation: Peace & Prosperity Hackathon

Phase 3 – Sustaining & Scaling Digital Innovation: Training of Trainers & Virtual Conference

The 2021 Programme cycle was delivered fully online due to challenges of the ongoing COVID-19 pandemic.

The expected outcomes of each phase were interconnected and mutually reinforcing. Between November 2021 and March 2022, participants learned through a combination of on-demand e-learning courses, e-workshops, live webinars with experts, a hackathon, a virtual conference, readings and exercises, and assignments.

### **Asynchronous e-learning**

Participants completed on-demand e-learning courses on EdApp, an online microlearning platform, to gain a solid grounding in the topics. The programme incorporated opportunities to “learn by doing” and practice on real-world situations.

### **Live webinars**

Participants joined live webinars across the two cohorts and submitted final assignments that explored in depth the issues introduced in the e-learning course. The webinars consisted of

- lectures by experts
- Q&A sessions
- group work

### **Needs assessment**

A needs assessment was undertaken to ensure that the programme was aligned with each country’s development priorities. We also considered feedback and lessons learned from previous cycles of the Japan-funded “UNITAR Hiroshima Anti-Corruption Training Programme for the Sahel Region,” along with relevant literature and interviews with regional and thematic experts.

### **Hackathon**

Designed as a platform for participants to put into practice what they’ve learned, the interactive online hackathon allowed participants to develop digital solutions to problems in their local and regional communities. Participants learned how to pitch their concept through teamwork and collaboration. It also gave participants practice in quickly creating innovative solutions using digital technologies to solve challenges in their communities.



The UNITAR training allowed me to boost my skills in IT, social and entrepreneurship.

*Ibrahim Ouedraogo*



## Programme Outcomes

Participants completed an online survey to evaluate their learning and the overall programme. The response rate was 51%. The survey assessed four areas:

- UNITAR's standard programme evaluation indicators ("New information," "Job relevance," "Intent to use," "Overall usefulness")
- Whether participants demonstrate proficiency in digital skill sets that match the areas of need in their local economies
- Whether participants identify and apply digital solutions to local challenges by turning problems into opportunities
- Whether local trainers (digital champions) through local partner institutions (digital innovation hubs) have strengthened capacity to
  - conduct localized training to sustain the upskilling and reskilling programme
  - apply skills and knowledge learned to respond to the sustainable development challenges in Sahel



The training from UNITAR was an enriching experience. I learned many things about gender issues, I acquired new knowledge and skills in artificial intelligence, digital and cybersecurity. I also [learned] how to train adults, self-confidence and public speaking. It was a human experience. We made many personal and professional connections with the other participants and mentors.

*Bonka Régine*





## UNITAR Standard Programme Evaluation Indicators

UNITAR's programme evaluation indicators include "New information", "Job relevance", "Intent to use" and "Overall usefulness".

- **New information** evaluates to what extent the programme provided new knowledge to the participants. Participants were asked to rate the statement "The information presented in this programme was new to me." Eighty per cent of the participants agreed or strongly agreed with this statement.
- **Job relevance** evaluates to what extent the programme was relevant to a participant's professional or academic roles. Participants rated the statement "The content of the programme was relevant to me and my work and/or studies." Ninety-seven per cent agreed or strongly agreed with this statement.
- **Intent to use** evaluates to what extent the participants intend to use their new knowledge. Ninety-nine per cent agreed or strongly agreed with this statement "It is likely that I will use the skills acquired."
- **Overall usefulness** evaluates to what extent the participants saw the programme as useful and was assessed by the statement "Overall, the programme was useful." Ninety-nine per cent agreed or strongly agreed with this statement.

While 25% of the respondents indicated that they already knew some of the content taught in the course, the responses to "Job relevance", "Intent to use" and "Overall usefulness" exceeded 90%, well above UNITAR's minimum target of 75% positive feedback.

These highly positive results allow us to conclude that the programme provided a useful learning experience aligned with the participants' professional roles and their needs.



## Course Objectives

- Recognize the implications of digital technologies for economic empowerment of individuals and the development of societies
- Identify relevant digital skillsets and develop a skills plan that suits personal development objectives
- Demonstrate proficiency in basic digital skillsets that match the areas of need in their local economies
- Outline how new skills and knowledge learned can have a direct personal impact in their communities
- Describe what factors enable successful change and development in the Sahel
- Identify real-world problems and challenges addressed by digital technologies
- Apply competencies in developing digital solutions that address development challenges and contribute to enduring and lasting peace and prosperity
- Test and validate the developed digital solution through peer-review and in collaboration with local partners
- Identify the characteristics and roles of an effective trainer
- Explain the theory of adult learning and the essentials for applying that theory
- Develop organizational skills to design and deliver training for adult learners
- Develop strategies to evaluate training effectiveness in supporting the Sustainable Development Goals (SDGs)







## Course Phases

### *Phase 1: Fostering Digital Literacy and Inclusion*

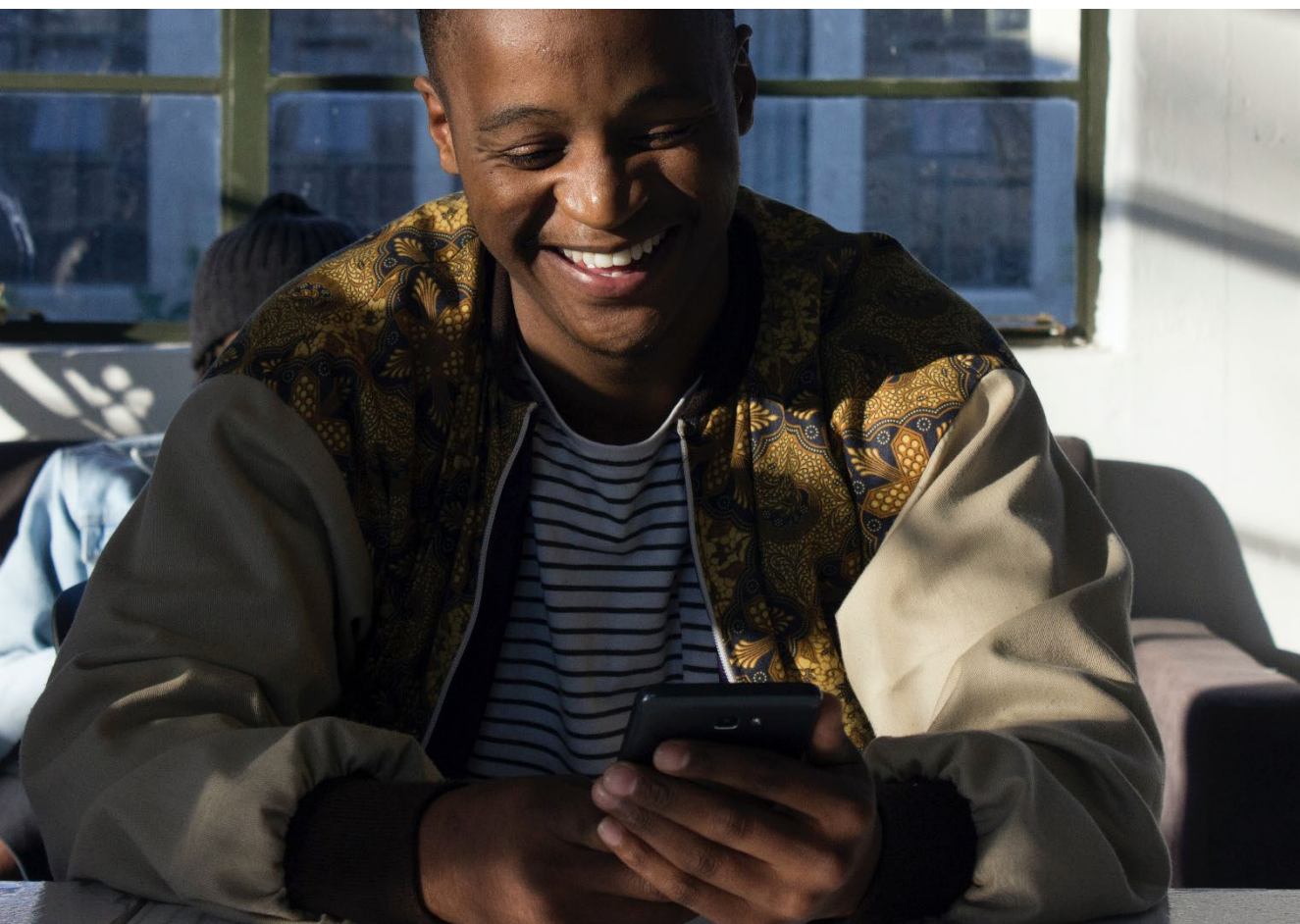
In this phase, participants completed on-demand online courses on EdApp that focused on the fundamentals of digital literacy, leading to lessons on programming and coding, app development, and artificial intelligence.

### *Phase 2: Sahel Digital Transformation: Peace and Prosperity Hackathon*

This phase had participants prepare for a hackathon. The participants who had successfully completed their assignments in Phase 1 were invited to join this second phase of the programme. They were first instructed on the overall hackathon process and the importance of working as a team with their team members. The hackathon topic was an extension of the final assignments submitted in Phase 1. Participants were given the opportunity to work with other participants to strengthen their ideas and learn from peers.

### *Phase 3: Sustaining & Scaling Digital Innovation: Training of Trainers & Virtual Conference*

This phase was a training of trainers (ToT), which trained selected participants to become motivated local experts. The topics ranged from adult-based learning to spreading awareness of new innovations and new insights. Participants were also taught how to deliver engaging presentations using PowerPoint, design a training for adult learners on locally/regionally relevant topics, and evaluate the training.








## Programme Activities and Schedule 2021-2022

	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22
Beneficiary Engagement & Partnership Development	█										
Content development, Context, Instructional Design			█	█	█						
Online Call for Applications						█		█			
Phase 1 1st cohort: 15 Nov - 31 Dec						█	█	█			
Phase 1 2nd cohort: 1 jan - 14 feb'22								█	█	█	
Phase 2 ToT 1 month Mid-Feb/Mid-March									█	█	█
Phase 3 Conference 1 day March											█
Online training prizes											█

## Assignments

In Phase 1, participants completed assignments that allowed them to digest and contextualize their learnings from the asynchronous e-learning. The topic of the final assignment was “Find a socioeconomic challenge faced by young people and women in the Sahel region. Propose a solution using digital technologies to solve it. If they passed the final assignment, participants could join the Phase 2 hackathon.





## Relevance of Objectives to Participant's Learning Needs and the Extent to Which They Met the Objectives

Participants assessed the relevance of the course objectives (listed in Programme Objectives section above) to their learning needs and the extent to which they met the learning objectives. UNITAR's target is to get over 75% positive feedback.

On average, 97% of the participants agreed or strongly agreed that the objectives were relevant to their learning. Similarly, 99% indicated they are likely to use the skills acquired. On average, 95% indicated that their knowledge on application development had increased and 97% said that their knowledge of cybersecurity had increased.

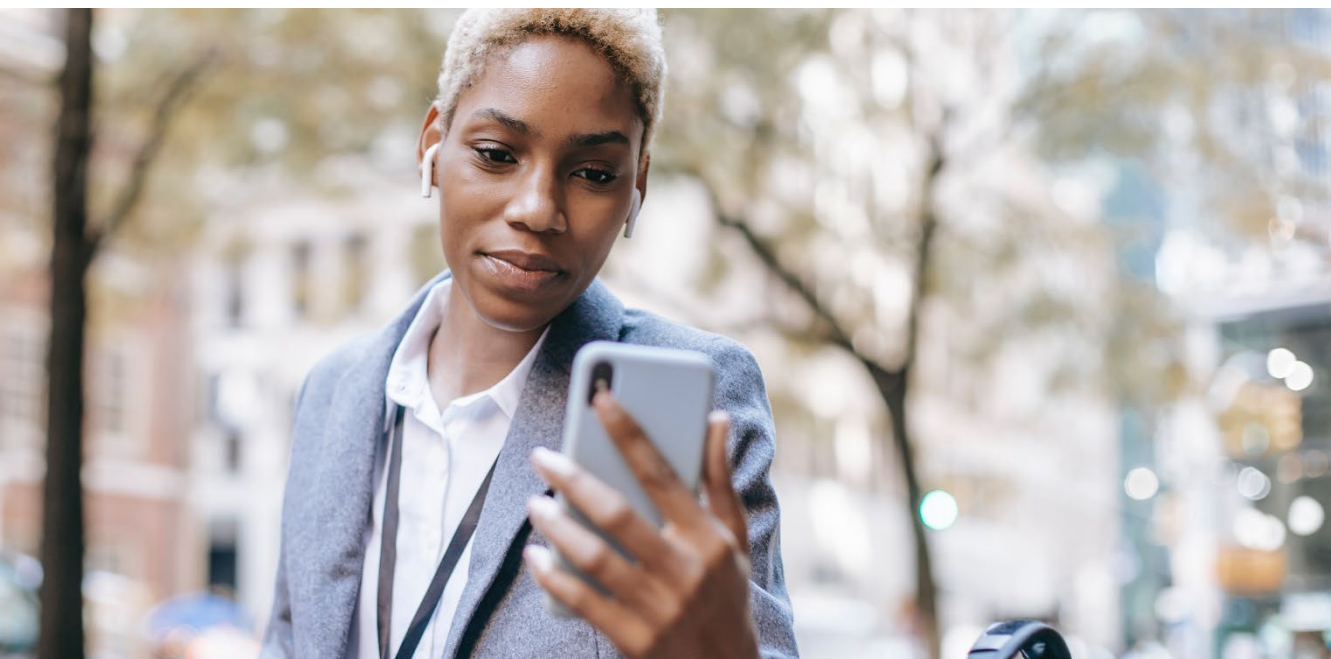
Ninety-six per cent of the participants recognized the implications of digital technologies for economic empowerment of individuals and the development of societies, while 97% identified relevant digital skillsets and developed a skills plan that suits personal development objectives.

The hackathon in Phase 2 received the lowest score, at 74% for increased competence. While the lower score largely had to do with the unfamiliarity of the concept of a hackathon, additional reasons shared by participants in the final webinar were that they felt they needed more time to prepare as their teammates were new to them and they felt underconfident for the public presentation – especially as this was the first time for many to present using PowerPoint slides. Unstable internet on the day of the hackathon also restricted their ability to participate, and participants suggested it would be better to form groups for the hackathon beforehand so they could contribute better.



Fascinating and very instructive, I was more convinced that we always end up finding additional/complementary knowledge in a well-developed course or programme. I hear that time is money. For me it isn't! It is the time associated with knowledge and/or skill that is money..

*Longock  
Kokoyi Didier*





## Effectiveness of the Programme Methodologies

To assess the effectiveness of the programme methodologies and structure, the participants were asked to rate the programme's effectiveness on the following four dimensions, on a scale of 1 ("Strongly disagree") to 5 ("Strongly agree"):

- UNITAR staff were knowledgeable and well-prepared.
- EdApp was effective as a mobile microlearning platform to impart new knowledge, tools and resources to learners.
- Resource persons, coaches and UNITAR staff gave adequate support to participants.
- Resource persons, coaches and UNITAR staff responded to learners' questions and provided feedback in a timely manner.

The results show that 97% of the participants agreed with the statements on the effectiveness of the EdApp platform and usefulness of assessments and assignments, with 95% indicating that the integrated quizzes helped them understand the lessons. These results encourage us to continue exploring a blended learning methodology with micro e-learning.

On the other hand, 80% of the respondents rated "the questions addressed in the discussion forum helped to improve understanding of the topics," suggesting the need to improve how we conduct the discussion forum – such as by adding more structured questions and making it a part of participants' weekly tasks to provide comments, thereby facilitating peer interaction.







## Knowledge Changes from Before to After the Programme

Participants showed a significant increase in knowledge and skills from before to after the programme. Participants rated their knowledge of the course topics on a scale of 1 (“Low”) to 5 (“High”).

Overall, the results show that the programme significantly helped increase participants’ knowledge in the targeted topics.

### Phase 1:

Significant progress was made in the fundamentals of digital literacy, which saw a high increase in level of skills and knowledge, from 45% to 91%. In programming and coding, there was an increase in skills and knowledge level from 35% to 89%. Knowledge on cybersecurity and artificial intelligence also grew from 38% to 89%, while knowledge on application development grew from 36% to 87%.

### Phase 2:

The hackathon aimed to give participants the chance to present what they’ve learned in designing digital solutions to the local challenges in their communities and region. All participants who completed all EdApp lessons and successfully submitted their final assignment were eligible to participate in the hackathon. A total of 669 participants across the two cohorts participated in the two hackathons (499 participants in the first cohort; 170 in the second).

The evaluation results show that participants increased their skills and knowledge from 30% to 60%. The medium impact may be due to the participants not feeling confident to present before their cohort and panel, along with unstable internet that logged them out of the sessions. Participants also shared that not all group members took the hackathon seriously, causing communication challenges.

### Hackathon

Cohort 1	28 December 2021	499 participants
Cohort 2	9 February 2022	170 participants



### Phase 3:

In the third phase, a training of trainers (ToT) was undertaken with participants from the two cohorts who had scored above 75% for their individual assignments and had high scores from their EdApp lessons. Country representation was also considered. At the end of the ToT, all participants from both cohorts were invited to attend a virtual conference. A total of 285 participants attended the virtual conference; the number may be due to internet connection issues that had affected the participants learning and engaging ability.

#### ToT

Workshop 1: Welcome & Introduction to the ToT	11 March	102 participants
Workshop 2: Introduction To Adult-based Learning (Myriam Nkwa)	14 March	141 participants
Workshop 3: Presenting New Information (Nabou Fall)	16 March	117 participants
Workshop 4: PowerPoint Learning (Adamou Oumarou)	18 March	177 participants
Workshop 5: Training Design and Evaluation (Rabia Moussa)	21 March	83 participants
Workshop 6: Closing	23 March	63 participants

#### Conference

Virtual Conference	30 March	285 participants
Conference		





# Lessons Learned

The programme showed that **building women's capacity and knowledge on 4IR by providing digital upskilling/reskilling is of great relevance** and UNITAR should continue working in this area. Many participants put their knowledge to use in response to the COVID-19 outbreak, which is creating major public health issues and raising the urgency for financial empowerment.

**Interest in the course has grown exponentially.** The programme's appeal lies in the cross-cutting nature between digital literacy, digital upskilling, and developing a sense of confidence in adapting digital solutions to the problems participants face in their communities and regions. Announcing the programme through social media and by word of mouth led to UNITAR receiving more than 1,400 applications. Participants who joined the 2021 cycle expressed interest in continuing the programme and having more cohorts in the coming years. Expanding the course or creating new content catering to other regions will require us to explore new funding modalities or donor partnerships.

The diversity of partnerships and contributors significantly enriched the content of the course. **We included Sahel-focused content and had experts from across Sahelian countries and the globe share their knowledge** in our webinars.

**UNITAR programme alumnae in the region** volunteered as contributors to this course. There are opportunities and partnerships to be realized, especially in content development catered towards the Sahelian and African region.

**Artificial intelligence and app development are of great interest to the participants,** especially to youth and women who are looking to start or have initiated their small businesses. The lessons on artificial intelligence, especially the focus on rights and duties and relevant case studies, were well received by the participants.

**Technical and connectivity fragility, including the cost of internet, continues to be a challenge** where some participants were located. While EdApp as a mobile-first platform with offline access was appreciated as a learning tool, UNITAR should, wherever possible, further develop easy and lower-bandwidth materials and tools. Participants mentioned their preference for in-person training throughout the course; however, the online modality – started in 2020 – has significantly increased the total number of learners UNITAR reached.

The hackathon, which gave participants an opportunity to present to a panel and peers in real-time, was well received. Many participants appreciated the opportunity to put into action what they had learned and use the shared group knowledge in designing solutions.





## Improvements Suggested by Participants

### *Pursue a blended learning modality*

While online learning has become the norm since the COVID-19 pandemic began, in-person trainings (or blended, combining online and in-person) are still preferred. As the pandemic becomes more manageable and international travel becomes possible, UNITAR may explore blended learning that combines in-person training with on-demand e-learning courses. The components could be flexibly selected to give the best fit for specific target groups and countries, their study environments, learning objectives and expected outcomes.

### *Make the programme longer in duration*

Participants shared that lessons on application development would benefit them more if they were more detailed and longer. This indicates the participants' desire to widen their understanding and spend more time learning new skills and knowledge, as they see it having a high relevance in their work and future endeavours.

### *Upgrade lessons on coding and programming with additional practical exercises*

Overall, there was high knowledge and skills transfer among participants in the data, programming, and coding lessons, with an increase in knowledge/skills levels from 35% before the training to 89% after. Participants also shared that they were eager to learn more and would find useful a training focusing on these topics. For the existing modules, participants said they would like more practical exercises to test and experiment with the learning content. UNITAR will look to improving these lessons further, incorporating the participants' feedback.



### *Add more digital-entrepreneurship-specific content*

While diverse content topics and regional experts were included in the programme, participants suggested that future cycles add digital-entrepreneurship-specific content in the following areas:

- Business plan
- Business management
- Project management
- Proposal for businesses
- Women digital entrepreneurs
- Data collection and data management
- Governance, including local issues such as customary land and access to resources

### *Stronger mentor and peer support*

While many participants shared positive feedback on the communications in their learning, some remarked they had difficulties connecting with their coaches, especially when the internet was unstable. Additionally, during the hackathon, which entailed group work, some group members were not fully participating and not responding to requests from other team members.

While feedback on the assignments and hackathons were largely positive, there is room for improvement to adjust the assignments to provide a deeper learning experience.





# Annexes

## Annex I

### Programme Agenda

SECTION	COHORT 1	COHORT 2	COURSES
<b>Phase 1 – Online Learning</b>			
Pre-Training			Week 0   Introduction to the Training Programme Introduction to distance learning Kicking COVID-19! Fighting the Disinfodemic: Deciphering COVID-19 Misinformation
Week 1- Digital Literacy			Working with a computer Access Information Online Part 1 Access Information Online Part 2 Create digital content. Part 1 Create digital content. Part 2 Create digital content. Part 3 Using a Computer Part 1 Using a Computer Part 2 Computer Literacy Quiz
Webinar 1 Welcome Webinar	17 Nov 2021	5 Jan 2022	
Week 2 – Programming and Coding			Programming Coding Programming Quiz Coding Quiz
Week 3 – App Development			What is an application Basic steps on how to create an app Application Development Quiz
Webinar 2	24 Nov 2021	12 Jan 2022	Cohort 1: Angela Messaa Entrepreneurship and Tech  Cohort 2: Rabia Moussa - Trends and Opportunities in the STEM field in the Sahel
Week 4 – Artificial Intelligence and Cybersecurity			Introduction Freedom of Expression. Part 1 Freedom of expression scenarios Right to privacy. Part 1





Right to privacy. Part 2  
 Right to privacy scenarios  
 Right to equality. Part 1  
 Right to equality scenarios  
 Summary and conclusion

Webinar 3 Sahel Programme Thematic Webinar	9 Dec 2021	19 Jan 2022	
Week 5 – Webinar 4 – Closing Webinar	15 Dec 2021	2 Feb, 2022	
<b>Phase 2 – Hackathon Learning</b>			
Hackathon	28 Dec 2021 (9:00 am to 13:00 GMT)	9 Feb 2022 (9:00 am to 13:00 GMT)	Topic: Identify a socioeconomic challenge faced by young people and/or women in the Sahel region. -Proposing a solution using digital technologies to solve it.
<b>Phase 3 – Training of Trainers</b>			
Workshop 1:	11 Mar 2022 (17:00 GMT)		Welcome & Introduction to the ToT
Workshop 2:	14 Mar 2022 (17:00 GMT)		Introduction to Adult-based learning - Myriam Nkwa
Workshop 3:	16 Mar 2022 (17:00 GMT)		Presenting New Information - Ms. Nabou Fall
Workshop 4:	18 Mar 2022 (17:00 GMT)		PowerPoint learning - Adamou Oumarou
Workshop 5:	21 Mar 2022 (17:00 GMT)		Training Design and Evaluation - Rabia Moussa
Workshop 6:	23 Mar 2022 (17:00 GMT)		Closing
<b>Phase 3 – Virtual Conference</b>	30 Mar 2022 (15:30 GMT)		

## Annex II

### Contribution to the 10 Core Values of UNITAR Division for Prosperity

Additional explanation		Results
<b>(1) Generate change agents</b>		
Number of people trained		1,001
Intensity of Training	Number of hours engaged (e.g., 100 hours). Type of training (hybrid, online, f2f)	60 hours, online (EdApp: 52; Assignment: 3; Group work: 1; Webinar: 4)
<b>(2) Engage in coalition building</b>		
Disaggregated data by:		
Gender	Male vs. female vs. others	290 women (29%) and 711 men (71%)
Stage of country development	How many participants are from industrialized vs. developing countries? How many from LDCs/SIDS?	100% LDC
Urban vs Rural	How many from the capital vs. others	
<b>(3) Build partnership</b>		
Number of partnerships	How many partnerships?	
Quality of partnership	Global, regional, or local organizations?	
	To enhance substance or financial contribution	Substance
<b>(4) Boost relevance</b>		
Feedback from participants	Use relevant quotes from participants	In the report
<b>(5) Enhance contextualization</b>		
Number and quality of coaches/mentors	How many coaches/mentors were engaged	5
	How many coaches/mentors were local or regional vs external?	
	How many coaches/mentors were former participants / alum of UNITAR programmes?	No alumnae



## Additional explanation      Results

### (6) Promote gender equality

Number of female participants	How many and percentage	290 women (29%)
Number of participants who completed the gender modules	How many and percentage	691 (69%)
Gender marking	Give a rating from 0 to 3 using the following criteria.	1
	Gender-markers 0 – Outputs/Projects that are not expected to contribute noticeably to gender equality and the empowerment of women (GEEW) 1 – Outputs/Projects that will contribute in some way to gender equality but not significantly 2 – Outputs/Projects that have gender equality as a significant objective 3 – Outputs/Projects that have gender equality as principal objective	

### (7) Foster innovation

Diversity of modes of delivery	Short description of what innovative modes were introduced	Hackathon and training of trainers (ToT)
Adoption of innovative adult learning methodologies	Short description of what innovative adult learning methodologies were introduced	EdApp on mobile devices (cellular phones, tablets, and computers)

### (8) Champion ownership

Quality of partnerships with local stakeholders	Short description	Local speakers were invited from diverse sectors (academia, government, and private)
Quality of the action plans	Short description of final outputs produced by the participants if any such as action plans	Participants developed comprehensive knowledge of 4IR concepts and produced digital solutions to local challenges in assignments and hackathon

### (9) Stimulate sustainable development

Number of participants who successfully completed the SDG modules	Same as left	651 (65%)
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### (10) Cultivate financial sustainability

Funding size	Same as left	Major
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