DEVELOPING ESSENTIAL DIGITAL SKILLS FOR WOMEN AND YOUTH IN AFRICA:

Enhancing Employment Opportunities and Livelihood Development in the Digital Economy

PROJECT COMPLETION REPORT 2023 CYCLE

ABOUT UNITAR

The United Nations Institute for Training and Research (UNITAR) was established in 1963 as an autonomous body within the United Nations and is headquartered in Geneva, Switzerland. As a training arm of the United Nations system, UNITAR provides innovative learning solutions to individuals, organizations and institutions to enhance global decision-making and support country-level action for shaping a better future. UNITAR designs and conducts some 500 different global training activities per year for more than 133,000 participants. Our alumni include diplomats and other government officials, non-governmental representatives, and local authorities.

UNITAR, Division for Prosperity

The Division for Prosperity is one of the eight divisions of UNITAR and consists of the Trade and Finance Programme Unit and the Hiroshima Office. We offer cutting-edge training and learning opportunities that promote inclusive and sustainable economic growth. Driven to "leave no one behind," we seek to promote inclusive and sustainable economic growth in the below listed thematic areas targeting society's most vulnerable – especially women and youth – in the least developed countries, small island developing states and conflict and post-conflict countries.

The Division for Prosperity programmes fall under six thematic pillars that support the Sustainable Development Goals (SDGs):

- Anti-corruption and Combatting Crime
- Entrepreneurship and Private Sector Development
- Finance and Trade
- Frontier Technologies
- Hiroshima and Peace
- Leadership and Empowerment

Leveraging our division's extensive experience in designing in demand, localized and targeted training, we adapt our learning methodologies and technologies to the needs of the participants, by understanding their skills gap, needs and their context. We work with learners in least developed countries, small island developing states, and fragile states, with special attention to the most vulnerable including women, youth, and those in conflict situations who are often faced with myriads of challenges.

Mihoko Kumamoto

Director, Division for Prosperity

ACKNOWLEDGEMENTS

We would like to express special gratitude to the Government and the People of Japan for their financial support, which enabled the programme to reach over 5,000 women and youth in 24 English-speaking African countries.

Special thanks to our technical supporters, IBM and Microsoft Africa, for offering a comprehensive curriculum and industry-aligned learning pathways to help women and youth navigate a digital-driven and evolving world.

This programme would not have been a success without the ecosystem partners, industry experts, innovation catalysts, government agencies, and representatives from the participating countries.

The unique offering and design of the programme, involving innovation catalysts, tech connectors, and ecosystem enablers, played a significant role in ensuring the participants understood scalability, invest-readiness, sustainable business models, and finance, as well as changing emerging technology opportunities they can tap into as they build innovative and bankable innovations and enterprises.

We also express gratitude to Toshiba Africa Kenya Branch, represented by Mr Iwasuke Shimada & Mr Joseph Kubasu; Sumitomo Corporation, Hakki Africa, Emurgo Africa, and Castalia-Japan were among the Japanese corporations invited during both the mid-term programme review and end-of-programme graduation where they presented opportunities they have for the youth and women from Africa.

Project Completion Report 2023 Cycle

EXECUTIVE SUMMARY

Programme Overview

The United Nations Institute for Training and Research (UNITAR), with its partners, designed and implemented the Developing Essential Digital Skills for Women and Youth programme in Africa to train and equip them with essential digital skills to navigate an ever-changing digital-driven world. In today's digital era, technological advancements have transformed industries, creating a growing demand for skilled professionals. However, there remains a significant skills gap that disproportionately affects women and youth in Africa. Recognizing this pressing issue, an immersive learning experience offering comprehensive training to empower over 5,000 women and youth with in-demand digital skills to meet the 4th Industrial Revolution and foster inclusive economic growth across Africa was implemented. The programme's objective was to enhance women and youth capacity to build and scale bankable innovations that respond to local social issues and demonstrate hands-on skills to grow in their professional paths in their respective countries and tap into the global workforce.

The programme was developed with the full financial support of the Government and the People of Japan and implemented with the institutional support of public and private-sector organizations worldwide.

At the end of the programme, participants had a wide array of digital skills that will boost their employability, as they will be empowered with the knowledge, skills, and tools needed to participate in an ever-more-digital society. This is pivotal for sustainable prosperity, as it fosters a more inclusive, equitable, and sustainable digital future for women and youth in Africa. Furthermore, providing participants with the ability to acquire skills is essential for sustainable development, as it promotes a growth mindset of lifelong learning.

2023 Programme Participants

The 2023 programme enrolled 7 000 women and youth from 24 English-speaking African countries; Botswana, Burundi, Eritrea, Eswatini, Ethiopia, Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Namibia, Nigeria, Rwanda, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Uganda, Zambia and Zimbabwe. 70 % of the participants were female and 30 % male.

Outcomes

- Digital skills serve as a key driver for youth and women's professional and personal development. In African countries with high unemployment rates, the taught skills have enabled many participants to start tech-enabled roles and businesses, positively impacting their lives and communities.
- Participants from countries with low mobile and internet penetration showed remarkable commitment and dedication despite connectivity challenges and lack of hardware, demonstrating resilience.
- Continuous learning and leadership development have benefited the beneficiaries, who are now committed to sharing the acquired skills with their respective communities.

Lessons Learned

- The digital skills program was one of UNITAR's largest initiatives focused on skilling, upskilling, and reskilling women and youth in Africa amidst the rise of emerging technologies such as AI. UNITAR's partnerships and collaborations with big tech companies and ecosystem stakeholders from various countries provided invaluable resources and expertise, significantly benefiting participants and advancing program objectives.
- Webinars featuring real scenarios and case studies offered valuable learning opportunities to better understand the African innovation and tech entrepreneurship landscape.
- Tech business initiation and support webinars created strong networking opportunities, with participants now successfully securing funding and running impactful tech-enabled enterprises in the region.
- Inspiring sessions for women in tech motivated participants to pursue successful tech careers and businesses, supporting UNITAR's commitment to closing the digital gender divide.

PROGRAMME SUMMARY

Background

Africa is a continent of extraordinary diversity and potential, with a population of over 1.4 billion people. The continent is home to some of the fastest growing economies in the world and is becoming more integrated into the global economy. African countries have experienced unprecedented economic growth in recent years, and the region is becoming an increasingly appealing destination for foreign investment. Furthermore, Africa is leading the way in digital innovation, with many countries adopting new technologies faster than their global counterparts. As start-ups and established companies compete to tap into the vast potential of the African market, the continent is also becoming a hub for entrepreneurship and innovation. For the continent to ready and seize opportunities in a digital driven world, the African Union's (AU) Agenda 2063 recognizes Science, Technology and Innovation (ST&I) as multi-functional tools and enablers for achieving continental development goals. The STISA-2024 Strategy for Africa, a part of the AU's ten-year implementation plan (2014-2023), aimed at accelerating Africa's transition to an innovation-led, knowledge-based economy by improving ST&I readiness in terms of infrastructure, professional and technical competence, and entrepreneurial capacity.

Digital technologies can provide innovative solutions to challenges like unemployment, food security, and climate change. Addressing the significant skills gap that disproportionately affects women and youth in Africa by nurturing local, sustainable, resilient, and innovative projects has tremendous potential to benefit communities and countries. As technology disrupts traditional practices and transforms economies globally, Africa could greatly benefit from digital skilling, upskilling, and reskilling programs. These programs increase opportunities for young human capital to contribute to and grow their economies, especially reaching underserved populations.

2023 Cycle participants

Focus Countries

Africa's population has surged to over 1.4 billion, with a median age of just 19.7 years. Despite the global growth of digital technology and recent AI advancements, African youth and women face significant employment challenges. These obstacles threaten regional stability and prosperity, risking poverty and inequality instead of fostering societal and economic growth. While the rest of the world benefits from digital innovations, Africa lags behind. Equipping young people and women with essential digital skills is crucial for transforming this demographic advantage into economic success and addressing persistent inequalities.

Although Sub-Saharan Africa is gaining geopolitical and economic importance, it still faces numerous long-term challenges. Rapid social, economic, and political changes present opportunities to improve conditions for women, who often struggle more than young men and fall into NEET (Not in Education, Employment, or Training) status. This situation exacerbates the gender gap due to unequal access to information, financial services, technology infrastructure, employment, and skills development. Addressing these disparities is crucial for fostering inclusive growth and development in the region.

Digital technology is crucial for building and growing startups, small and medium-sized enterprises, and the informal sector. Therefore, it's essential to equip youth and women, as aspiring entrepreneurs, with digital skills and innovation tools to address ongoing regional challenges. Globally, women and girls are 25% less likely than men to leverage digital technology, four times less likely to know how to program computers, and 13 times less likely to file for a technology patent. This disparity highlights the urgent need for targeted digital training programs to bridge the gender gap.

These issues are more prominent in the region due to lack of financial investment and lack of digital literacy, on average, woman-owned companies and innovations do not have access to tools and resources placing them at a disadvantage of the benefits of digitalization.

UNITAR designed the programme with the above in mind and thrives to build the capacity of youth and women in entrepreneurship and start-ups in order to take advantage of the benefits of digitalization. The participants of the programme were drawn from Botswana, Burundi, Eritrea, Eswatini, Ethiopia, Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Namibia, Nigeria, Rwanda, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Uganda, Zambia and Zimbabwe.
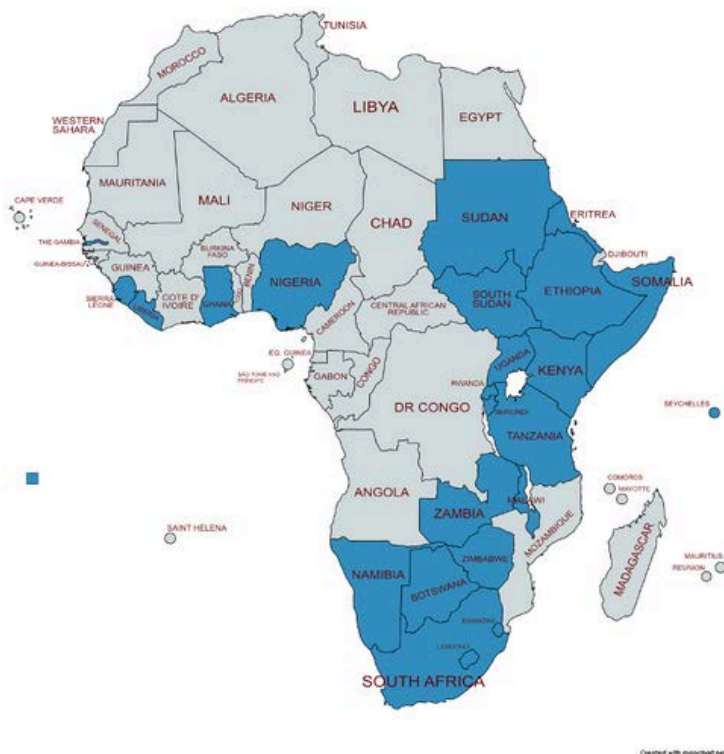
·Botswana
·Burundi
·Eritrea
·Eswatini
·Ethiopia
·Gambia
·Ghana
·Kenya
·Lesotho
·Liberia
·Malawi
·Namibia
·Nigeria
·Rwanda
·Seychelles
·Sierra Leone
·Somalia
·South Africa
·South Sudan
·Sudan
·Tanzania
·Uganda
·Zambia
·Zimbabwe.

Programme Applicants profiles

During the call for applications a total of 8,392 applications were received. Some of the applicants were out of target country scope, further screening and selection process was done to give an opportunity to those who met the eligibility criteria.

UNITAR applied a rigorous screening and selection methodology for the Developing Essential Digital Skills for Women and Youth in Africa programme. A call for applications was made online looking for women and youth who were able to demonstrate commitment to digital technology to work on a solution that responds to local challenges and, in turn, leverages digital technology to reach underserved and underprivileged people to have equal access to information, opportunities and resources.

The programme also sought individuals with an entrepreneurial spirit eager to learn digital entrepreneurship through the use of business tools. This initiative aims to equip people with the necessary knowledge and skills for equal access to learning and employment opportunities. Moreover, the programme desired individuals capable of exhibiting leadership skills to drive change and embody the transformation that Africa aspires to achieve and contribute to the region's legacy.

Following the application submission, eligible applications underwent a thorough review by the UNITAR programme team. This selection process included evaluating the completeness of each application, as well as assessing the applicant's qualifications, relevant experience, and commitment to entering the tech industry and driving innovation in a digital-centric environment. Additionally, there was an examination of the applicant's country-specific context, including access to internet and hardware, alongside awareness of global digital trends. Subsequently, successful applicants were notified in writing and offered a place in the program.

All successful applicants were notified via email and other communication channels. Further scrutiny included a detailed assessment of their skills gap. For example, this involved evaluating scenarios such as a student lacking work experience, a woman aiming to re-enter the tech workforce after a career break of more than three years, freelancers seeking global gig economy opportunities, and individuals seeking to upskill for enhanced job and career mobility.

The program categorized participants into foundational, upskilling, and industry-skilled tracks. Content was tailored to match each applicant's technical proficiency and aligned with their career and entrepreneurial ambitions. From the initial pool of 7,000 qualified applicants, they were divided into two profiles and distributed between IBM and Microsoft, our technical partners offering industry-standard skills curriculum and content.

Digital Connectivity & Access by Participants

The majority of participants who expressed interest had access to laptops, internet, smartphones, or feature phones capable of storing downloaded content. Most applicants successfully registered on the online platform to access content, attend webinars, and view recordings if they missed sessions. Uploading certificates as proof of completion was also facilitated, although there were occasional technical challenges encountered.


Below is the persona of applicants as evaluated, screened and selected during the programme initial phase followed by an onboarding webinar from UNITAR, Embassy of Japan Kenya, Pasona Group and Technical partners IBM and Microsoft.

Applicants Persona

- Student/Not working — 42%
- Break into Tech — 43%
- Industry Skilled — 15%
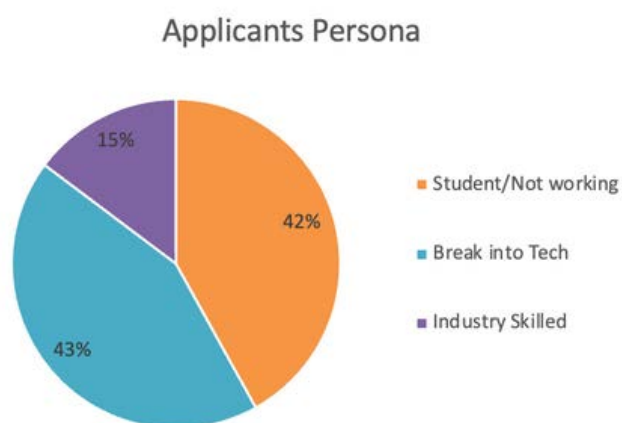
Following the persona screening and selection process, the applicants were evenly distributed between UNITAR's technical partners, IBM and Microsoft. These tech giants dominate the technology sector with distinct strengths, crucially enabling youth and women to participate in and excel within the digital world, both in jobs and enterprises. Each partner deployed a skilled technical team to collaboratively design content and facilitate online webinars. IBM contributed expertise from Brazil, South Africa, and Morocco, while Microsoft supported from across Africa and the UK.

The program's uniqueness and innovation lie in its ability to forge partnerships that foster mutual learning while delivering industry-relevant, recognized, and high-demand skills for the future. This initiative aims to boost job readiness and entrepreneurship among African youth and women. Feedback from our partners underscores the success of this collaborative approach.

Below is the distribution of cohorts per partner based on the shortlisted 7,000 youth and women applicants from Africa:

COHORT DISTRIBUTION

50%   50%

■ IBM Track

■ Microsoft Track
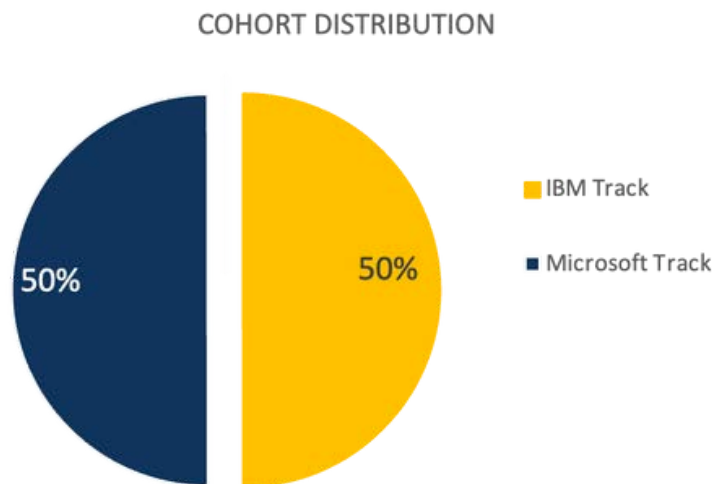
The design of the Microsoft cohort aligns with the organization's commitment to global digital inclusion, skills development, and emerging technologies crucial for Africa's future. By cultivating a skilled workforce, fostering innovation, and tapping into emerging tech markets, the program not only drives economic growth but also promotes social inclusion and reduces inequalities. Its scalability, social impact, and focus on inclusion make it a pivotal partnership for both UNITAR and Microsoft in shaping a brighter future for Africa's youth and women, while advancing technological innovation across the continent.

Under Microsoft, digitized content was tailored according to role-based criteria, offering focused pathways for skills relevant to jobs, foundational literacy, productivity, soft skills, and entrepreneurship. Additionally, advanced tech-enabled roles such as cybersecurity, data analytics, business intelligence, and generative AI were emphasized with specialized content. Supplementary materials also covered sustainability and green digital skills, highlighting foundations of sustainability in technology.

UNITAR, in collaboration with IBM SkillsBuild, developed modules enriched with cutting-edge learning resources and insights from global tech leaders. These modules covered foundational topics such as the history of computing and essential concepts related to computer parts, network connections, hardware, software, computer security, and troubleshooting techniques. They also provided learners with practical tips and resources for launching a career in tech.

In the realm of emerging technologies, the program offered an overview of tech-enabled roles starting from the basics of web development and fundamental tech concepts. Additionally, there was an extensive exploration of cloud computing, encompassing service models, deployment strategies, software usage, and the business benefits of cloud technology. Learners engaged in hands-on simulations, including building and deploying Docker containers and configuring security settings for IBM Cloudant databases, thereby creating a marketable pathway for those pursuing careers in cloud and cybersecurity. AI modules in both cohorts were designed to guide participants from understanding AI's history to exploring its transformative potential. Participants delved into AI's predictive capabilities, language understanding, image processing, and learning mechanisms inspired by neural networks. They also gained practical experience through simulations where they built and tested machine learning models, concluding with insights on pursuing careers in the AI space.
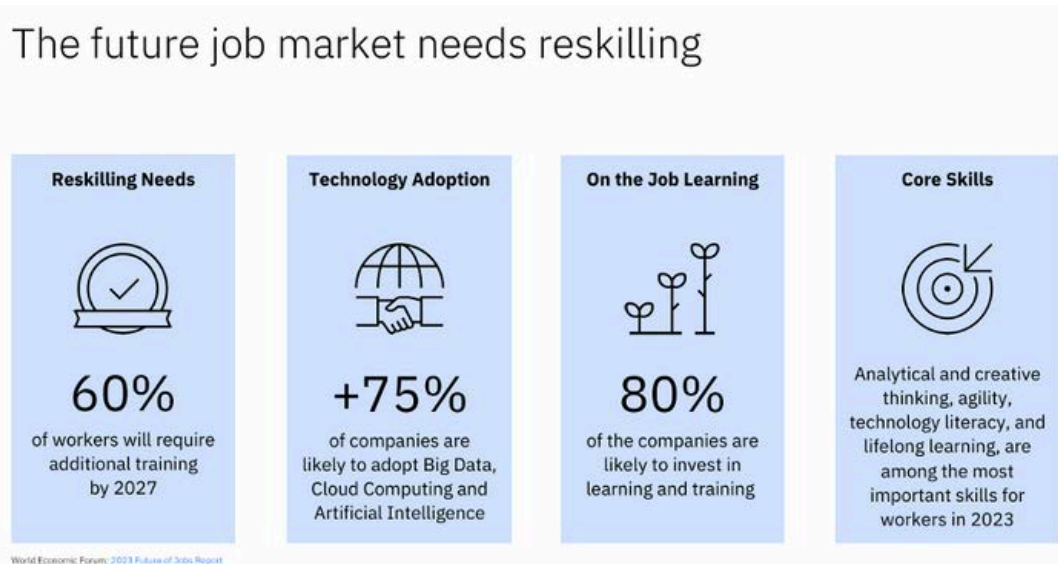
A unique addition to each cohort's content was communication skills, recognized as essential for aspiring entrepreneurs and tech professionals alike. Notably, the "Mindfulness" module by IBM focused on self-awareness and personal development, equipping learners with tools to self-regulate, center themselves, and maintain mental well-being.

Moreover, selected participants had the opportunity to meet with key stakeholders, including the Ambassador of Japan to Kenya, Mr. Ken Okaniwa, Hiroshima office Head of UNITAR, Chisa Mikami, Microsoft Philanthropies Lead for Sub-Saharan Africa, Winnie Karanu, IBM's Head of CSR for EMEA, John Matogo, representatives from the Nairobi County government's Department of Digital Economy, industry experts, and ecosystem enablers during a special event in Nairobi.

The overall design and implementation of the programme was anchored on the premise of the World Economic Forum on the future of jobs that requires reskilling hence the programme narrowed the gap by skilling, reskilling and upskilling youth and women in 24 English Speaking Countries in Africa.

Overview of the future of jobs needs in reskilling, reinforcing the need for continuous and innovative learning programmes that are core to UNITAR mandate.

The future job market needs reskilling

Reskilling Needs	Technology Adoption	On the Job Learning	Core Skills
60% of workers will require additional training by 2027	**+75%** of companies are likely to adopt Big Data, Cloud Computing and Artificial Intelligence	**80%** of the companies are likely to invest in learning and training	Analytical and creative thinking, agility, technology literacy, and lifelong learning, are among the most important skills for workers in 2023

World Economic Forum: 2023 Future of Jobs Report

Digital skills are crucial for driving digital transformation and play a pivotal role in each country's digitization journey. Instilling these skills remains a cornerstone of national digital transformation strategies, essential for narrowing the global digital divide. Many individuals in developing countries currently do not utilize the internet due to lacking the necessary capacities and skills, hindering their ability to access online information and services. Moreover, enhancing digital skills through skilling initiatives will continue to bolster citizens' digital capacities, thereby increasing internet usage among job seekers. Individuals equipped with digital skills generally have higher success rates in securing employment, both locally and globally.

Foundational Track: Applicants in this track were selected based on their basic technical proficiencies, including familiarity with operating hardware devices, internet access, and overall tech savviness. The content was tailored to cover IT fundamentals, essential computer skills, an overview of emerging technologies, professional and soft skills, as well as the fundamentals of business development through design thinking.

The majority of participants in this track were students or individuals with limited or no workplace experience seeking skills to apply for job opportunities or to launch their own businesses.

Upskilling Track: Applicants in this track were evaluated based on their existing proficiency and professional skills, as well as their ability to articulate their career goals post-training. The majority of applicants in this track possessed two or more years of work experience and aimed to acquire additional skills to transition into new sectors, such as breaking into tech, seeking promotions, or pursuing tech-enabled ventures or enterprises. A significant portion of these applicants were women transitioning from administrative roles to technical positions or government/public sector employees aspiring for career advancements.

Industry Specific Track: Applicants in this track were selected based on their extensive professional experience, such as freelance web designers seeking to augment their skills in project management and digital marketing. Many participants in this track already possessed advanced-level tech knowledge and were focused on acquiring in-demand digital skills to either upskill for job opportunities or to scale their tech-enabled businesses. Some participants also explored opportunities within the creative economy, with modules on digital marketing and content creation being particularly sought-after.

The program design was structured to achieve the following phases throughout the program:

Phase I: November - December 20234

- Enhance Job readiness
- Understand the interplay between digital technology and sustainable economic growth
- Develop foundational understanding of digital technology and critical thinking
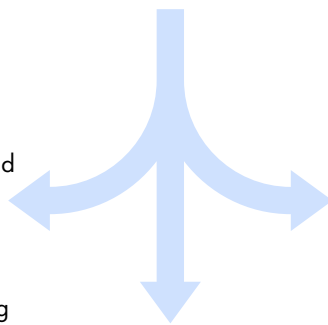
Phase II: December 2023 - January 2024

- Develop entrepreneurial and innovation skills
- Self-led projects development and entrepreneurship
- Contribute to the development of digital ecosystem and contribute to inclusion

Phase III: February - March 2024

- Explore emerging technologies & economic development.
- Develop leadership skills to drive change and innovation
- Develop soft skills to navigate a digital driven world

Technical Partner Profile – During the program launch, IBM and Microsoft conducted onboarding webinars where they collaborated to provide foundational and fundamental skills, essential tech-enabled roles, and essentials such as digital literacy, project management, software development, entrepreneurship development, and soft skills like communication and mindfulness. These webinars served as a platform for both technical partners to introduce their teams, showcase the content hosted on their platforms, and connect participants to UNITAR's learning environment through dedicated landing pages.
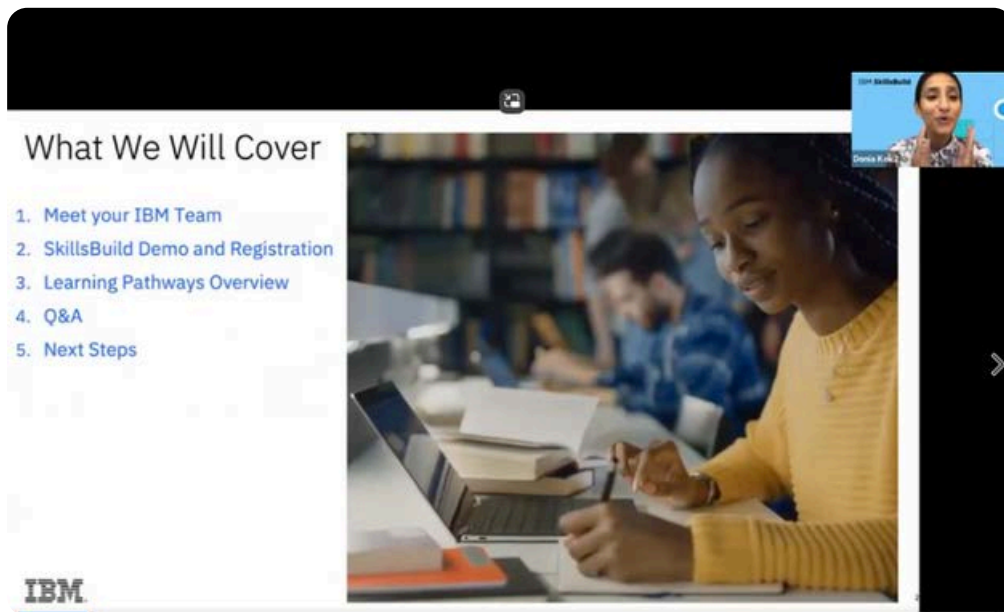
IBM Team drawn from all corners of Africa in support of the programme, echoing the need for skilling, upskilling and reskilling youth and women with digital essential skills for the future of work. The programme support and expertise were Pan African.
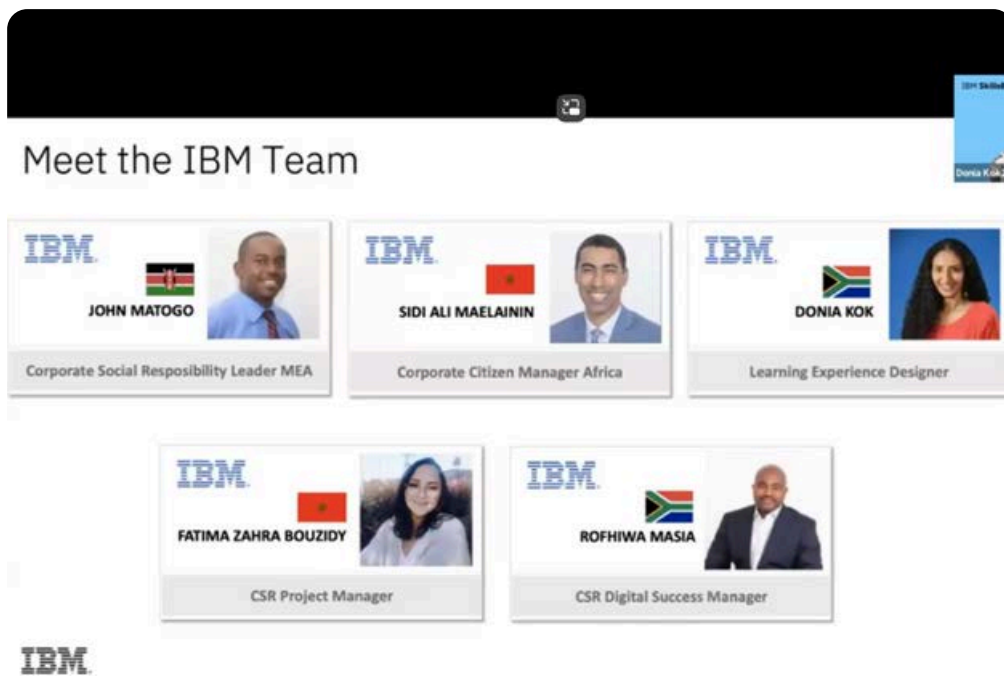
Microsoft designed curriculum skills for jobs and a dashboard of all programme aligned content available for the UNITAR learners across the Microsoft Community platform and downloadable content on UNITAR Learning management system.

Microsoft content and resources were designed to uniquely meet the needs of participants looking to build careers in technology as well as develop livelihoods leveraging technology.

Skills for Jobs Learning Pathways Content Overview

Skills for Jobs & Livelihoods

The self-paced nature of the content and engagement within the Microsoft learning community enabled the participation of learners to be interactive and provide an opportunity to go back to discussion. The partner LinkedIn learning provided an additional value to the participants who were guided on strategic job search using job insights, strong resume writing as well as opening global opportunities in the era of remote working.

Learners' Growth in their Digital Skills
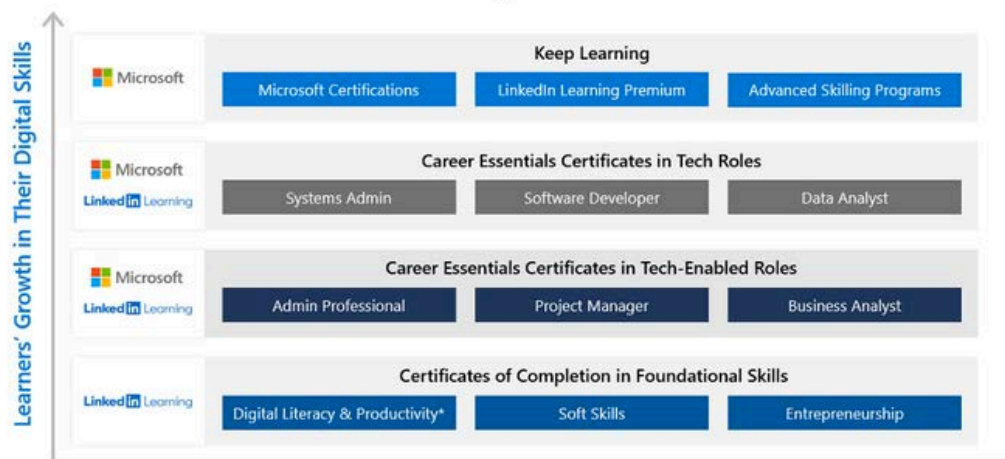
Microsoft Africa, a multinational technology corporation dedicated to empowering every person and organization worldwide to achieve more, was allocated 3,500 participants through UNITAR's partnership. Over 50% of these participants were women, distributed across all tracks including foundational, upskilling, and industry-skilled tracks. The UNITAR and Microsoft partnership focused on several thematic areas: digital skills development, innovation and entrepreneurship, economic development and SDGs, women and youth empowerment, private sector and startup development, broader partnership development for ecosystem growth, green livelihood and technology.

UNITAR and Microsoft Africa officially coordinated this partnership and signed the Memorandum of Understanding (MOU) during the UNGA 2023, marking the commencement of a significant initiative aimed at equipping youth and women in Africa with in-demand digital skills. Pictured during the signing were Mr. Nikhil Seth, Executive Director of UNITAR and Assistant Secretary-General, Director of the Division for Prosperity; Corporate Vice President of Microsoft Philanthropies, Kate Behncken; representing Country Manager of Microsoft East Africa, Phyllis Migwi; and Director of the Division for Prosperity, Mihoko Kumamoto.

Harnessing digital technologies can be vital to creating sustainable growth and development and achieving the Sustainable Development Goals (SDGs). However, many across the world do not readily have the means to acquire the new skills to benefit from the rapid technological advances. Failing to address such disparities leaves us further away from achieving the SDGs. We are delighted to collaborate with Microsoft to support our capacity-building and training programmes on digital skills to women and youth in Africa, to enhance employment opportunities, promote livelihood development in the digital economy, and overall contribute to sustainable development in Africa and beyond." — Mr. Nikhil Seth, UNITAR Executive Director.

Microsoft Africa key team was led by Microsoft Philanthropies lead – Winnie Karanu and Microsoft Africa Development Centre (ADC) the engineering hub of Microsoft in Kenya, Digigirls programs lead – Irene Githinji, the team had this to say about the programme

. "So, Microsoft is committed to empower every person and organization in the planet to achieve more, which means that we work with partners like UNITAR or the national government but also the county governments to be able to reach ordinary citizens." Winnie Karanu Philanthropies Lead-Microsoft Sub-Sahara Africa

IBM SkillsBuild platform created by IBM with an aim to provide job seekers, including long-term unemployed, school dropouts, migrants, and veterans worldwide, with the digital content, career and project mentoring and experiential learning they need to gain technical and professional skills required to re-enter the workforce. The SkillsBuild platform was developed as a thoughtful, holistic approach to corporate social responsibility that integrates IBM's values and maximizes IBM's positive impact as a global enterprise and, in connection with this approach, IBM seeks to open up technological resources and expertise in order to solve the social problems faced in communities all around the world.

"In the last few months, i think we have seen a model that works. We've brought together a number of learners from different countries across Africa. And from the testimonials that were shared earlier today. It is clear that there has been some significant transformation in terms of the learning that they have acquired in the last few months. A call to other who are keen and interested in in the skilling of African youth to join us. Let's make this and empower the young people to build a better future. "John Matogo, Middle East & Africa Leader IBM Corporate Social Responsibility


Programme participants by Gender and other factors

Over 52% of applicants fell within the youth bracket (15-35 years), as defined by UN and country metrics. Approximately 38% of applicants were women aged 35 and above, underscoring a strong interest among women in pursuing tech-enabled roles and the critical importance of skilling, reskilling, and upskilling opportunities for them. It is noteworthy that many existing programs in the region often exclude individuals above the age of 35, limiting opportunities for those seeking to advance their careers in technology. Feedback from women highlights various challenges such as motherhood, unpaid caregiving responsibilities, and extended career breaks, which often result in them being left without training and hinder their professional progression. Initiatives like this program are vital in providing these women with the necessary leverage to re-enter the professional world and pursue their career aspirations.

Moreover, approximately 50% of the shortlisted applicants demonstrated proficiency in digital technology fundamentals, with 30% currently employed in technical and non-technical fields. Among all applicants, 30% were self-employed, primarily engaged in entrepreneurial activities and aiming to integrate digital technology into their ventures for profitability and social impact.

A significant number of applicants indicated possessing at least a college diploma, bachelor's degree, or equivalent qualifications, or were currently pursuing higher education. The applicant pool was notably diverse, with over 15% earning income through the gig economy in fields like graphic design, consulting, and software development. Additionally, some participants sought to enhance their university education with in-demand digital skills to facilitate their transition from academia to the workforce.

Below is a graphical representation illustrating the gender distribution of all applicants who participated in the Essential Digital Skills Development Program, funded by the People and Government and implemented by UNITAR with technical support from IBM and Microsoft Africa.

Gender Distribution

Non Binary 0%
Male 30%
Female 70%

■ Female   ■ Male   ■ Non Binary
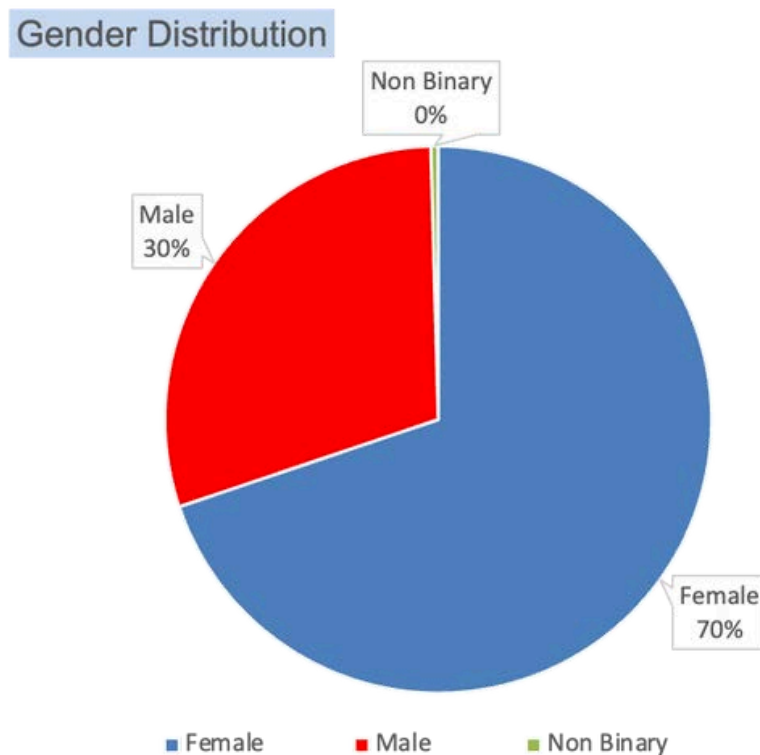
Programme Structure and Methodology

The program "Developing Essential Digital Skills for Women and Youth in Africa: Enhancing Employment Opportunities and Livelihood Development in the Digital Economy" was designed to provide training, knowledge-sharing, and capacity-building in digital and entrepreneurial skills across 24 anglophone African countries.

In today's digital era, rapid technological advancements and emerging technologies have revolutionized industries, creating a heightened demand for skilled professionals. However, there remains a significant digital skills gap, particularly affecting women and youth in Africa. Recognizing this critical issue, UNITAR, with support from the People and Government of Japan, stepped forward to address this gap, aiming to enhance job readiness and employment opportunities through digital upskilling and reskilling initiatives.

The immersive learning experience offered comprehensive training designed to empower women and youth with essential digital skills necessary to thrive in the Fourth Industrial Revolution. This initiative aimed to foster inclusive economic growth in Africa, a continent increasingly home to major international tech giants like Microsoft, Google, and IBM. Upon successful completion of the program, 5,000 participants received recognized certifications, validating their digital competencies and enhancing their professional profiles. High-performing participants demonstrating hands-on skills were connected with leading tech firms in the region.

Throughout the program, participants deepened their knowledge through a robust curriculum aligned with industry standards. Learning pathways included software development, AI, blockchain, cybersecurity, data science, digital marketing, data analysis, and other vital digital skills essential for women and youth navigating the digital landscape and evolving global workforce.

Program activities encompassed expert-led support, facilitator-led sessions, self-paced online courses, and coaching. A key component was the engagement in self-led projects, where participants received training in ideation, problem-solving fundamentals, and virtual hackathons. Innovation catalysts, business experts, and ecosystem enablers provided support, facilitating startup initiatives. Peer reviews of business models with expert feedback strengthened participants' innovations. The final activity focused on leadership development, continuous learning, and networking top participants with investors, ecosystem enablers, and experts to support their ideas and enterprises. Impact evaluations were conducted during in-person workshops to assess program effectiveness.

	Activity I – Online Training	Activity II – Virtual Boot Camp and Self-led Projects (Application)	Activity III – Sustainability and Community Leadership Training
Components	• Pitch evaluation • Expert-led with coaching support	• Peer/mentor review/evaluation of business models • Expert-led with coaching support	• Training of trainers • Training for coaches • Expert-led with coaching support • Impact evaluation • Graduation
Delivery	Online/asynchronous course	Online	Track 1: Online Track 2: hybrid online/in-person
Track 1: Digital Skills Development Training	5,000 participants 24 English-speaking sub-Saharan African countries	25 participants	25 participants

Programme linkages to Africa's Women and Youth economic disruption

The program was designed to strongly advocate for the empowerment of women and youth, aiming to address gender gaps prevalent in the tech industry by enhancing their competitiveness in the global job market through digital competencies. This initiative ensures they are well-prepared for the future workforce and can actively participate in the digital economy, harnessing emerging technologies such as AI, cybersecurity, and data analytics.

UNITAR and our technical partners believe that the program will have significant impacts in the region, including:

- **System Shift:** Transforming the African workforce through digital skills development to reduce unemployment, bridge the digital skills gap, and foster innovation and market-relevant skills for sustainable development.
- **Strategic Value:** Aligning with IBM and Microsoft's commitment to global digital inclusion and skills development across diverse geographies, especially in Africa where an estimated 230 million new jobs requiring ICT skills are projected by 2030.
- **Global Social Impact and Inclusion:** Strengthening IBM and Microsoft's role in global digital inclusion efforts, targeting underserved communities and promoting social inclusion through digital transformation.
- **Talent Pipeline:** Cultivating a skilled workforce aligned with IBM and Microsoft technologies to drive economic diversification, enabling them to contribute to diverse industries globally.
- **Market Expansion:** Tapping into Africa's emerging tech markets and innovation hubs to fuel economic growth, catalyzing positive change with youth and women as catalysts in Africa and beyond.

- **Scalability:** Designing the program for scalability to reach millions of participants across Anglophone countries, with potential to expand into Lusophone, Francophone, and the Sahel region through digital delivery for rapid adaptation to diverse contexts.
- **Social Impact:** Empowering youth and women in Africa through digital skills to reduce inequalities and shape a better future, seizing opportunities in the era of emerging technology.
- **Inclusion:** Addressing gender disparities and targeting underserved communities such as Persons with Disabilities (PWD), with IBM and Microsoft contributing to tech accessibility and responsible AI to ensure no one is left behind in the digital economy.
- **Emerging Technology:** Ensuring African youth and women play a significant role in advancing technical innovation across the continent.

Phenomenal women in tech, drawn from institutions like IBM, META, and the Tony Blair Institute, have played a pivotal role in closing the gender digital divide. For instance, Fatima Dawood, VAD Leader Software at IBM South Africa, shared her journey navigating a demanding career alongside motherhood and other responsibilities.

Donia, one of the core leads during the program, also shared her challenges balancing work with caregiving responsibilities while building a successful career. These stories underscore the importance of supporting women in tech and empowering them to thrive in the digital age.

Career Story: Fatima Dawood, VAD Leader Software, IBM S...

- 10 years of experience in the IT field, joined IBM in 2022
- Married and a mother of 3 kids
- Extensive knowledge in different IBM Software technology

"My motto is teamwork makes the dream work, and I can't explain to you how much I believe in this and how many times I have seen it work both personally and professionally. Something most people don't know about me is that I love horseriding and Netball. When I was younger, I went as far as Nationals for South Africa in the women's Netball team, and horseriding is something I have included my kids in during weekends, my horse is called Molley.

I consider myself a very organized, responsible, and honest person who works extremely well both independently and in a team. I would say my strength is my kindness, believe it or not, most people think that being kind is weak, I believe being kind in a tough World and in todays times is actually a strength."

IIn the past, we have celebrated headlines of pioneering women in various fields. We recently had the honor of hosting Kendi Ntigwa, the first female Managing Director of Microsoft Africa, who shared her journey in leadership, spanning roles across different countries while balancing her responsibilities as a mother and wife. She currently serves as the Global Head of Actor Solutions at META. Also present was a prominent woman leader in fintech, now serving as the Head of Technology and Digitalization at the Tony Blair Institute, who shared her experiences navigating the complex financial technology space.

These women in tech webinars served as a powerful source of inspiration for both young and seasoned women aspiring to build successful careers in technology across Africa and globally.

All phases of the program were meticulously designed and delivered to cater to women of all ages, as well as youth and Persons with Disabilities (PWD), across English-speaking countries. They were eager to leverage digital technology to enhance their employment and innovation prospects, seizing the opportunity to acquire skills essential for shaping the future of work and innovation.

Phase I – Online Training: Participants engaged in self-paced fundamental e-modules on the UNITAR digital learning platform. They also participated in webinars, workshops, and received online coaching and mentoring support.

Phase II – Self-led Projects and Virtual Boot Camp: Participants were selected from Phase I based on their performance, assignment completions, engagement, and presentations. This phase allowed them to apply their acquired skills to identify problems, ideate solutions, and innovate to address developmental challenges. A dedicated UNITAR hackathon environment enhanced their learning experience and community interaction.

Phase III – Sustainability and Community Leadership Training: Participants who advanced to Phase III underwent rigorous evaluations of their Phase II projects and innovations. They showcased their solutions and received additional training on community-building and leadership skills, becoming UNITAR digital ambassadors and establishing a robust network for future cohorts.

Below is the program progression graph for each track, such as the Foundational Track – Microsoft Cohort Phase I-III, which represents a complete cycle of the program, and the Upskilling Track – IBM Cohort Phase I-III, also a complete cycle. All learners completed Phase I, engaging in self-paced online learning, submitting assignments and case studies for evaluation, and demonstrating proof of completion. Those who progressed to Phase II implemented their learning practically, identifying, problem-solving, designing, innovating, and testing minimum viable products or prototypes that addressed community challenges spanning unemployment, climate change, skills development, and other thematic areas.
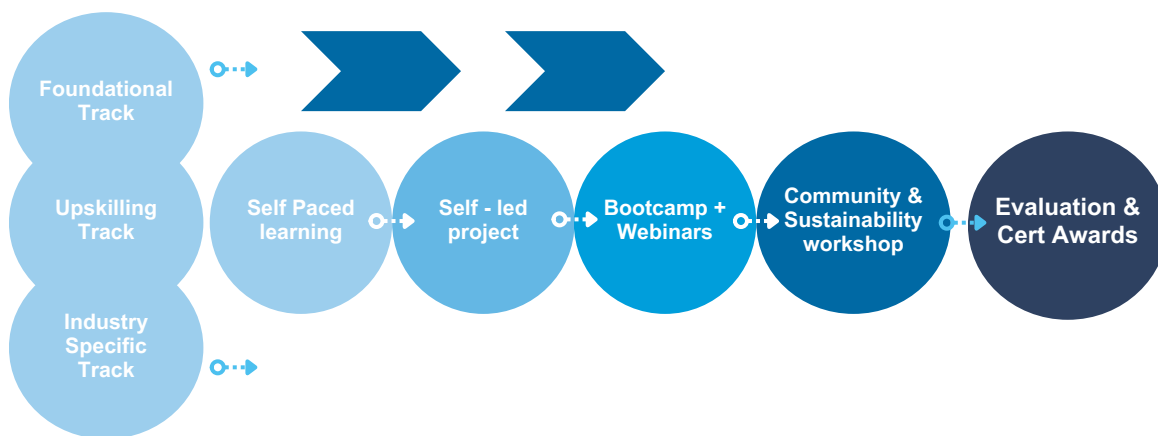
After Phase II, an independent hackathon team assessed the projects based on criteria such as feasibility, scalability, impact on individuals and communities, inclusion of youth-led or women-led initiatives, and the application of technology as a business enabler. Successful applicants advanced to the leadership development and sustainability phases, which included peer reviews conducted in person during workshops. Participants who successfully completed the program were awarded certifications jointly accredited by UNITAR, Microsoft, and IBM, enhancing their marketability and enabling them to pursue employment opportunities globally. Those who did not progress to Phase III received recognition awards, certificates of completion, and participation.

The programme methodology involved participants completing self-paced (asynchronous) e-modules on the UNITAR digital learning platform, complemented by workshops, webinars, and online coaching and mentoring support. This approach equipped participants with a competitive edge in today's digital world, providing insights into employability through partnerships with LinkedIn and Korre.IO, a merit-based CV writing platform. These engagements linked participants with industry experts, including members of the African diaspora, who shared their journeys and insights from leading tech firms such as Google, Meta, TikTok, and Oracle, offering valuable mentorship and guidance. Key outcomes of these engagements included empowering participants with competitive advantages in the job market and access to diverse employment opportunities across various sectors. The programme also facilitated learning from relatable industry experts whose lived experiences enriched the mentorship process.

Expert-Led Training involved a team of seasoned instructors, mentors, and industry experts who guided participants through hands-on training sessions, particularly during Phase II, the hackathon. Comprehensive design thinking principles were covered by IBM, with ecosystem enablers from Kenya and South Africa providing modules on ideation using a human-centered approach to problem-solving and venture building. This practical approach equipped participants with real-world skills applicable to diverse scenarios.

Networking and Collaboration opportunities were diverse, offering virtual and in-person connections where participants could engage with a community of like-minded individuals. This environment fostered meaningful relationships and potential partnerships, including mentorship from diaspora members. Additionally, participants gained skills in investor identification, relationship building, pitching, and other essential aspects necessary for business scaling or personal skill enhancement.

Recognition and Certification were provided to all participants who successfully completed the programme, acknowledging their newly acquired digital skills. Participants who did not complete all phases received a certificate of participation. Continuous learning was encouraged to ensure participants remained updated in their fields of expertise.

All phases of the programme featured facilitator-led workshops, webinars, and expert sessions covering topics ranging from digital technology in Africa to discussions on women in technology. Special activities included IBM and Microsoft sprints, as well as professional branding workshops facilitated by LinkedIn.

Phase II required participants to apply the foundational knowledge gained in Phase I through virtual boot camps and self-led projects. Successful progression through Phases I and II led participants to Phase III, where they received additional training focused on sustainability, enhancing their community-building and leadership skills, and preparing them to serve as trainers for future programme cohorts.

To facilitate continuous learning and community engagement, an online platform was established where participants could share experiences, engage in debates and case studies, and connect with employers, mentors, and members of the African diaspora. Learning resources were accessible through partner platforms such as IBM SkillsBuild, Microsoft Community Training programme, and LinkedIn Learning, ensuring a comprehensive and enriching learning experience.

UNITAR employed a state-of-the-art training architecture combining self-paced learning with assessments, online discussions, and personalized coaching and mentoring. This pedagogical approach, refined over years of experience, enabled participants to absorb information, engage in activities, interact socially, and reflect on their learning, thereby enhancing their digital skills effectively.
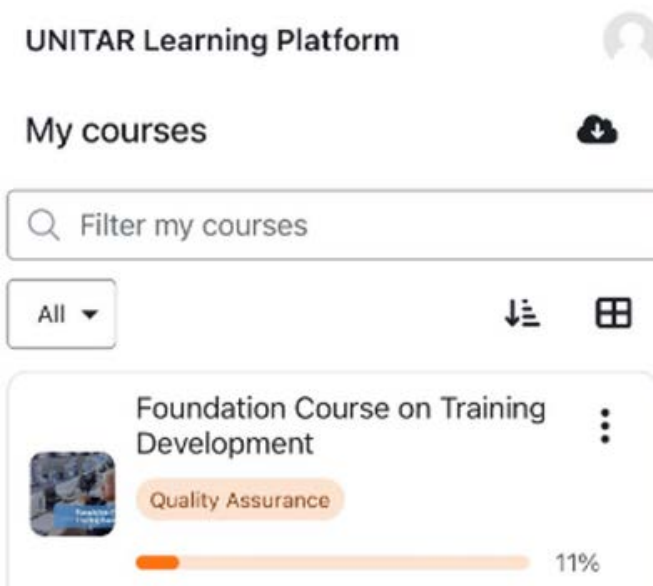
The programme was structured into distinct phases:

- **Phase I:** The entire curriculum for foundational, upskilling, and industry skilled tracks was uploaded to a dedicated UNITAR landing page, providing a seamless learning journey for participants. This online approach enabled participants to absorb content at their own pace and revisit the learning environment even after expert training sessions.

Participants engaged in self-paced e-modules, completed quizzes, participated in case studies, storytelling, and scenario-based learning exercises on both UNITAR and technical partners' community and digital learning platforms. They also attended webinars, participated in community discussions, workshops, and received online coaching and mentoring support.

Learning Methods

Lessons (Online)
UNITAR Learning Platform
Self-paced lessons

Videos
Videos to enhance learning with some of the lessons
Practical examples of digital technology innovations and case studies

Expert-Led Webinars
Live, interactive webinar series with industry experts and coaches

Extra Resources
Links to websites and tools for entrepreneurs

Expected Learner Effort Load
2-4 hours per week

Discussion Forums
Learn from your peers through online discussions

- **Phase II:** Following the self-paced training and webinars, Phase II required learners to demonstrate practical application of their newly acquired skills through self-led Projects and participation in a virtual Boot Camp. These activities were structured around specific themes and facilitated challenges aimed at fostering innovation.

Participants were expected to develop innovations, ideas, and enterprises that addressed development challenges or created livelihood opportunities in their respective countries. A dedicated hackathon environment was designed to facilitate brainstorming, co-creation, and the development of Africa-centric solutions. This platform encouraged participants from diverse countries to collaborate on solutions that would benefit their communities and countries.
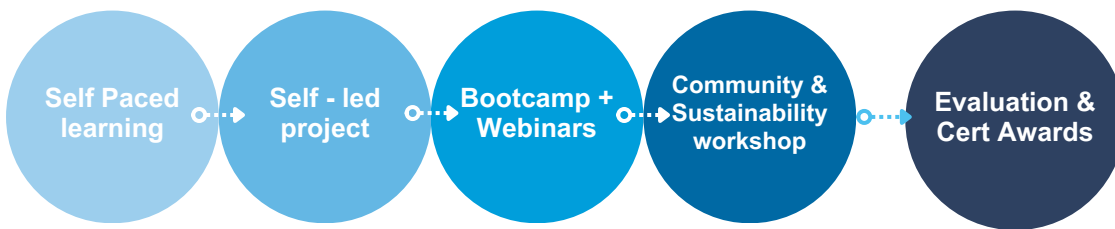
- **Phase III –** Following the rigorous phases I and II, participants were evaluated based on the strength of their ideas, innovations, and enterprises, using metrics such as their impact on themselves and their communities, scalability, sustainability, and contributions to addressing challenges like employment, food security, or climate change. After evaluation, the top 25 youth and women underwent a pitching clinic where they presented their ideas, further developing their community leadership skills. Those who emerged as top performers received additional training in community-building and leadership. They were also trained as Trainers of Trainers, empowering them to champion the programme and join a robust network of trainers for future cohorts.

The programme's innovative approach involved inviting experienced youth and women from various technology sectors to share their career journeys and provide mentorship to participants. Additionally, mid-term programme reviews were conducted in Harare, Zimbabwe, and Nairobi, Kenya, aimed at engaging learners and assessing the programme's progress.

Programme progression and mid-term review – Meet and greet Nairobi and Harare

After Phase I, a comprehensive review of the participants' learning journey was conducted through a two-day workshop. This workshop evaluated the training programme for women and youth empowerment in green livelihoods and digital skills, which had been supported by an investment exceeding USD 1 million. Dubbed a "Meet and Greet" session, the event brought together women from across Zimbabwe and Kenya who had undergone training in developing essential digital skills. The session aimed to enhance their job readiness and foster innovation through entrepreneurship.

The programme aims to establish an engagement platform where beneficiaries can exchange learning experiences. Technical partners IBM and Microsoft engage directly with participants in Zimbabwe and Kenya, fostering connections with ecosystem partners, seasoned tech professionals, entrepreneurs, and relevant government ministries in these countries. Additionally, participants receive coaching on resilience-building, resume development, and breaking into diverse tech spaces to narrow the gender gap. The two-day experience provided valuable feedback before participants engaged in self-led projects. The visual below illustrates the progression through the programme's three phases.

Self Paced learning → Self - led project → Bootcamp + Webinars → Community & Sustainability workshop → Evaluation & Cert Awards

Programme Midterm review – Kenya News

29 January 2024, Nairobi, Kenya – UNITAR held a mid-term review of its training programme "Developing Essential Digital Skills for Women and Youth in Africa" in Nairobi, Kenya. The event brought together ecosystem and industry experts, government officials and partners to share industry and market insights, and mentor and advise the programme participants to optimize their learning journeys.

At the mid-term review, a round-table discussion was held on how digital technologies such as artificial intelligence (AI) can be leveraged to unlock employment and livelihood opportunities in Africa. The Ambassador of Japan to Kenya and Zimbabwe, IBM, Microsoft, Digital Economy Department of the Nairobi City County and other ecosystem partners shared their remarks.

Speakers highlighted the significance of upskilling and reskilling to respond to the digital skills gaps among youth and women in Africa. Youth and women in Africa are keen to leverage digital technologies and well-designed programmes can empower and inspire them to innovate and enhance their livelihoods. The training participants also showcased the progress of their social-impact projects. The projects include providing essential digital skills for community youth, agricultural entrepreneurship focused on rural women, enhancing the safety of women in the digital space, and other practical applications of digital skills to challenges faced by the participants and their communities.

Seen in the image is UNITAR Head of Hiroshima office Ms. Chisa Mikami, H.E. Mr. OKANIWA Ken, Ambassador Extraordinary and Plenipotentiary of Japan, Mr. Fumihiro Uchikoshi Second Secretary Economic Affairs and Economic Cooperation Section Embassy of Japan in KENYA and UNITAR Programme Specialist Mr. Michael Adalla. during the official event held in Nairobi, Kenya.

UNITAR *Head of Hiroshima Office Ms. Chisa Mikami in her speech highlighted the following in her opening remarks*

"*The rapid progress of technology and the emergence of new technologies have brought about significant transformations in various industries. This has led to an increased need for skilled professionals. However, a notable gap in digital technology skills persists, disproportionately affecting women and youth in Africa. In response to this challenge, this programme, funded by the People of Japan, develops essential digital skills for 5,000 women and youth in Africa to enhance their employment opportunities and livelihood development in the digital economy. The programme enhances job readiness and employment opportunities by providing digital upskilling and reskilling in the rapidly evolving world of technology in 24 English-speaking countries in Africa.*

With one of the youngest populations in the world, enhancing employment opportunities for the growing number of youths in Africa is essential to ensure the stability and prosperity of the region and ensure that population growth contributes to societal and economic growth.

UNITAR is thankful to the People of Japan for their financial support in this programme. UNITAR, in partnership with the People of Japan, has been working towards reducing inequalities, ensuring no one is left behind and achieving the SDGs and Agenda 2063 in Africa. UNITAR is equally thankful to our partners in this training programme, Microsoft, IBM and Pasona Group inc. Your expertise, networks and resources have so far enabled participants to have a comprehensive, empowering learning experience that has provided a wide range of knowledge, skills, and practical insights."

Ms. Chisa Mikami, Head of UNITAR Hiroshima Office, also addressed the participants during the event. She emphasized their commitment to learning and eagerness to engage in continuous learning as crucial for cultivating entrepreneurship and embracing technology as a catalyst for positive change. Ms. Mikami expressed her excitement about meeting all the participants in person, thanking them for their dedication to learning and hoping they found the journey enjoyable so far. She urged them to continue utilizing the content and resources available, emphasizing their potential to foster entrepreneurial skills, enhance employment opportunities, and cultivate professional curiosity. These resources are aligned with the needs of the digital economy, which drives change in today's digitally driven world.

During the discussion, participants actively contributed by sharing their learning journeys. They highlighted the value of the program content, noting its alignment with emerging technologies and the importance of soft skills such as mindfulness. Many recognized that mental wellness is crucial for achieving success in both business and career goals.

All the participants expressed their gratitude to the government and people of Japan for the opportunity to upskill, reskill to enhance their job readiness in a digital world as well as foster innovation through entrepreneurship.
A collective thank you was sent in placards

ASANTE SANA WATU WA JAPANI. - A heartfelt thank you to the People and Government of Japan

The meet-and-greet in Nairobi, Kenya was graced by His Excellency the Ambassador of Japan to Kenya, who underscored the transformative potential of digital technology in economies. He encouraged youth and women to acquire globally recognized digital skills to thrive in the Fourth Industrial Revolution and prepare for international opportunities in today's digitally driven world. His Excellency emphasized the importance of mastering skills to enhance marketability, even within Japan's workforce. Additionally, Mr. Okaniwa praised the design and implementation of the programme.

The meet-and-greet program gathered participants from various parts of Kenya, including men, women, and people living with disabilities. Betty Mwende, pictured during the event, is one of the program beneficiaries living with a disability and a success story of the digital skills program. She presented a bag signed in different languages by the participants, symbolizing unity and collaboration among the learners. During the event, His Excellency had the opportunity to interact with participants and learn about their self-led project ideas and existing initiatives as they prepared for the second phase of the program.

Betty, as depicted in the photo, had secured funding from the Mastercard Foundation following her phase I training. She participated in a design and pitch program where she applied her newly acquired skills and won a prize of $1,000. With this funding, she purchased a laptop to conduct a skilling program for girls in her village in Meru County, Kenya.

Betty Mwende – UNITAR Alumni and a woman living with disability in Kenya
"With unwavering determination, I committed to refining my skills through the Microsoft pathway. I am immensely grateful for the opportunity to announce the successful completion of the Developing Essential Digital Skills for Women and Youth in Africa program, facilitated by UNITAR with the generous support of the People and Government of Japan, Microsoft, and IBM. This journey transcended mere knowledge acquisition; it was a journey of empowerment. It equipped me with the essential tools and expertise to thrive in the digital age, enabling me to make meaningful contributions to my community and beyond.

I extend heartfelt gratitude to UNITAR, Microsoft, IBM, and the People and Government of Japan for their steadfast support. Together, we are not only closing gender and skills gaps but also paving the way for a more inclusive and empowered future."

In addition to participants, His Excellency the Ambassador of Japan to Kenya, Mr. Ken Okaniwa, engaged with various industry partners, including technical partners IBM and Microsoft, government representatives from Nairobi County, investment firms, women and youth-led organizations, women in the tech and mining industries, and entrepreneurs from Kenya. These invited guests provided valuable insights and mentorship to the programme participants.

The programme emphasized mentorship and ecosystem enablement to establish enduring connections between participants and the workforce, entrepreneurship ecosystem, and investors within their respective countries.

One key element of the programme is the continuous expert mentorship provided by industry leaders and partners who share valuable insights with the participants. During the mid-term programme review, a roundtable discussion on leveraging digital technologies such as Artificial Intelligence (AI) to unlock employment and livelihood opportunities in Africa was held. Mr. Uchikoshi Fumihiro, Second Secretary, Commercial & Trade Attaché, Economic Affairs & Economic from the Embassy of Japan to Kenya, expressed his *"appreciation for UNITAR's cooperation and efficient management of the project"*.

He noted the presence of government representatives from Digital Economy departments, the Power Learn project—an organization empowering youth and women in software engineering, Base Titanium—a mining and technology company supporting women, Women in Tech Kenya, Women in Tech Academia, and the Director of Market-Driven Innovation at the Digital Cooperation Organization.

Closing the gender gap in technology was a focal point of the programme's outcomes. Invited guests included women from various tech sectors spanning mining, ecosystems, investment, government, and major technology firms, holding roles such as engineers, innovation managers, data analysts, cybersecurity experts, information technology professors, as well as young women in project management and tech-driven entrepreneurship.

During the in-person event in Nairobi, the progress and success of the programme were highlighted by His Excellency Ambassador Ken Okaniwa during a press conference. *"This training will enable women and youth to tackle various challenges they face. UNITAR has done an excellent job providing essential digital and livelihood development skills to young people and women so they can apply them immediately after completing the programme. It's a significant opportunity for all of them,"* said Ambassador Ken Okaniwa, Ambassador of Japan to Kenya, who graced the occasion, delivered a keynote address, and heard firsthand testimonials of the programme's impact.

At the end of the two-day mid-programme review, a thank you photo was taken with Kenyan participants holding big Thank you placards to the Government and People of Japan.

Zimbabwe Programme Mid-term review

Another mid-programme review was held in Harare, Zimbabwe, providing participants with an opportunity to share their learning journeys and experiences. Invited to the event were key stakeholders from relevant government ministries, ecosystem enablers, and industry experts who offered mentorship and guidance to those aspiring to advance in entrepreneurship and their professional careers.

Among the distinguished guests were H.E. Mr. YAMANAKA Shinichi, Ambassador Extraordinary and Plenipotentiary of Japan in Zimbabwe; Prof. P. Matondi, Permanent Secretary of the Ministry of Environment, Climate and Wildlife; Dr. B. Chirume, Permanent Secretary of the Ministry of Information, Communication and Technology; Tariro Chipepera, Permanent Secretary of the Ministry of Women Affairs, Community, SMEs Development, and Youth; Dr. Mandas Marikanda, CEO of Zimbabwe Women's Micro Finance Bank (ZWMFB); Mr. O. Ngwenya, CEO of Small and Medium Enterprises Development Cooperation (SMEDCO); Mr. Brian Nyagwande, Chief Executive Director of The National Youth Council; Mr. S. Mhembere, CEO of Empower Bank; Mr. Solomon Mhlanga, Permanent Secretary of the Ministry of Youth Empowerment, Development, and Vocational Training; and Dr. Mavis Sibanda, Permanent Secretary of the Ministry of Women Affairs, Community, SMEs Development.

These stakeholders collectively contributed to the success of the mid-programme review by providing valuable insights, mentorship, and support to participants striving to excel in their entrepreneurial and professional endeavors.

The meet and greet event united participants from two Japan-funded programmes: Developing Green Livelihoods and Essential Digital Skills for Youth and Women in Africa. UNITAR's Division for Prosperity Unit was represented by Mr. Michael Adalla, Programme Specialist, Monicah Wangeci, Programme Support, and the Head of the UNITAR Hiroshima office, Ms. Chisa Mikami, who delivered the opening and welcome remarks.

Ms. Mikami provided an overview of UNITAR's global initiatives and expressed gratitude for the Japan-funded programmes. These initiatives have empowered over 150 youth and women with skills in innovative, climate-resilient, and climate-smart agriculture enterprises, as well as provided resources to scale existing medium and small enterprises that align with local opportunities. Additionally, more than 5,000 youth and women have received training in essential digital skills to enhance their ability to secure and excel in 21st-century jobs.
Ms. Mikami emphasized the critical role of these programmes in equipping participants with fundamental tools and expertise to address climate change challenges. She highlighted the importance of empowering women and youth with skills to develop green livelihoods that are innovative, digitally enhanced, and resilient in today's digital-driven world.

During the day's engagement, all invited dignitaries offered their remarks, emphasizing the importance of skilling, reskilling, and upskilling youth and women in Africa. They noted the emergence of new technologies and the growing demand for future skills in both the African and global workforce.

The dignitaries also participated in a roundtable discussion led by UNITAR's Head of the Hiroshima Office, Ms. Mikami, on the topic "Essential Skills in the Digital Economy: How to Leverage Digital Technologies, Including Artificial Intelligence (AI), to Unlock Employment and Livelihood Opportunities in Africa."

In his remarks, the Ambassador of Japan to Zimbabwe, H.E. Mr. YAMANAKA Shinichi, highlighted the significant threat posed by the digital technology skills gap, which leaves the youngest population in Africa—youth and women—behind, further exacerbating the digital divide.

He also addressed climate change as a significant global concern with severe impacts on the environment, food security, and economic stability. He emphasized that climate change affects rainfall patterns in Zimbabwe, with droughts becoming more frequent and impacting the livelihoods of many smallholder farmers, particularly women and youth. Additionally, he noted that the emergence of new technology provides innovative opportunities to mitigate climate change impacts. Transitioning to a green economy is urgent, and Japan's work in the development space in Africa will continue to focus on digital technology as an essential tool for this transformation. Cutting-edge technologies such as Artificial Intelligence (AI) can help predict climate-related disasters, inform decision-making, and support business development, among other benefits. He also mentioned that technology brings significant opportunities in pre- and post-harvest processes, underscoring the need to skill youth and women to grow their expertise in climate change adaptation, mitigation, sustainable practices, and technology.

Presentations from invited ministries
Permanent Secretary, Ministry of Environment, Climate and Wildlife

Professor Matondi emphasized a crucial aspect of the climate question in the Green Livelihood programme, "Developing Green Livelihoods for Women and Youth in Africa: Strengthening Food Security, Supporting Climate Smart Economies." He elaborated on the concept of "green life" and its comprehensive definition within the context of a country facing both opportunities and challenges. He discussed how these possibilities align with the Zimbabwean government's goals, particularly in light of Vision 2030, launched by the President of Zimbabwe, His Excellency Dr. E. D. Mnangagwa. Vision 2030 envisions Zimbabwe addressing climate change and becoming a clean, green nation.

Dr. Matondi emphasized the importance of tackling waste pollution through innovative and effective waste management initiatives. He invited participants to present their initiatives at the ministry level, as these efforts are essential to achieving a cleaner Zimbabwe.

Permanent Secretary, Ministry of Information Communication Technology, Postal and Courier Services

Dr. Chirume pledged continued support to increase access to ICT services in Zimbabwe. She highlighted the efforts made by the government and the Ministry of ICT to improve access to ICT services through community information centers across the country. She expressed gratitude to UNITAR and the government of Japan for their capacity-building programmes, emphasizing their significant role in enhancing the skills of women and youth. Dr. Chirume urged the participants to utilize the digital skills acquired through the programme "Developing Essential Digital Skills for Women and Youth in Africa: Enhancing Employment Opportunities and Livelihood Development in the Digital Economy" to improve their employment prospects and contribute to their communities.

Key ecosystem enablers and finance institutions

For youth and women to grow and scale their enterprises, financial capital and business initiation coaching are crucial. UNITAR invited the Zimbabwe Women's Microfinance Bank, a key financial partner for thriving businesses in Zimbabwe, to witness the enterprises that participants from the programme are running. This connection aims to link participants to the financial capacities needed to scale and pivot, aligning their businesses with green and digital practices and strategies as a result of the programme.

Managing Director – Zimbabwe Women's Microfinance Bank

Dr. Mandas Marikanda expressed gratitude to UNITAR and the people and government of Japan for implementing such a vital programme focused on digital skills and green livelihoods. She emphasized that these skills are instrumental in helping women and youth grow both individually and within their communities. Dr. Marikanda highlighted the gaps observed by the Women's Finance Bank since its inception in 2018, noting that many women-led enterprises struggle due to insufficient funding and lack of access to finance resulting from unpolished and non-bankable business ideas. She pledged the bank's support for the programme beneficiaries, committing to help upscale their businesses through access to finance, mentoring, and capacity building. Dr. Marikanda acknowledged the potential of the innovative ideas presented during the pitching session at the event.

Chief Executive Officer, Youth Empower Bank

Mr. S. Mhembere pledged to support the youth programme participants in strengthening their business proposals and crafting financial solutions. He indicated possible fundraising initiatives to mitigate the effects of climate change and digitalization, aiming to complement the existing bank capacity by engaging like-minded institutions, such as the Japanese Embassy.

Chief Executive Officer, Small and Medium Enterprises Development Cooperation (SMEDCO).

SMEDCO, a government-owned development finance institution in Zimbabwe, is dedicated to providing financial and capacity-building services that support the establishment and growth of cooperatives and SMEs. Mr. Obert highlighted that SMEDCO operates seven branches nationwide, offering services such as capital expenditure, working capital, order finance, women's loan products (Chiedza Kaya Mama), workspace, and sector-specific training. He emphasized that the business ideas presented during the event met SMEDCO's criteria for being considered "bankable." Looking ahead, he envisions collaborating with UNITAR on a country-wide capacity-building programme aimed at developing youth and women-led businesses and enterprises.

CEO – ZIMBABWE WOMEN FINANCE BANK & CEO YOUTH EMPOWER BANK

Certificate award and presentation
Participants received certificates of participation from Japanese embassy special attaché and head of Hiroshima Office Head in the presence of all stakeholders invited.

Participants award the Ambassador of Japan to Zimbabwe with a programme merchandise signed in different local languages by the participants at the end of the meet and greet event in Zimbabwe.

Programme Africans in Diaspora engagement

OOne unique aspect of the programme was its emphasis on connecting participants with Africans in the diaspora working across diverse industries, particularly in technology. We had the privilege of engaging Mr. Stewart Samkange, LinkedIn's Higher Education Leader for Africa, Central, Eastern Europe & Southeast Europe, a Zimbabwean national residing in Dublin, Ireland. During the personal and professional branding session, he drew from his own experiences to share effective job search strategies and insights into the future of work. He also imparted storytelling techniques that participants could use to enhance their global job search efforts. Following the webinar session, Mr. Samkange expressed his thoughts, noting that it had inspired many participants to create profiles on LinkedIn and even lead workshops in their respective areas of expertise within their workplaces.

LinkedIn Higher education-Africa, central and easter Europe & Southeast Europe leader Mr. Stewart Samkange

Empowering African Talent: Leveraging LinkedIn for Career Advancement Presenting and partnering with United Nations Institute for Training and Research (UNITAR) to enable youth and women to become pivotal players in the global workforce.
UNITAR is hosting this transformative hands-on webinar where participants will embark on a journey to refine their professional brand identities to enable them to access #jobs #internships #remotework #employment and other economic opportunities

Recognizing the critical importance of digital literacy and the unique position of African women and youth in the global workforce, this webinar is tailored to equip them with dynamic tools for effective self-presentation, bridging the gap between talent and opportunity in the digital age. In addition, the session aims to unlock the potential of #youth and#women guiding them through the nuances of leveraging LinkedIn for professional networking, job searches, and personal branding in the 4IR era.

Thanking our partners Microsoft, IBM, @monicah Wangeci UNITAR Esther Kinuthia – KOREE.io Donia Kok (Farghaly) IBM
#jobs #careers #jobseekers #empowerment #skills #insights #ai #gethired #linkedin #socialimpact #africa #itstime2shine.
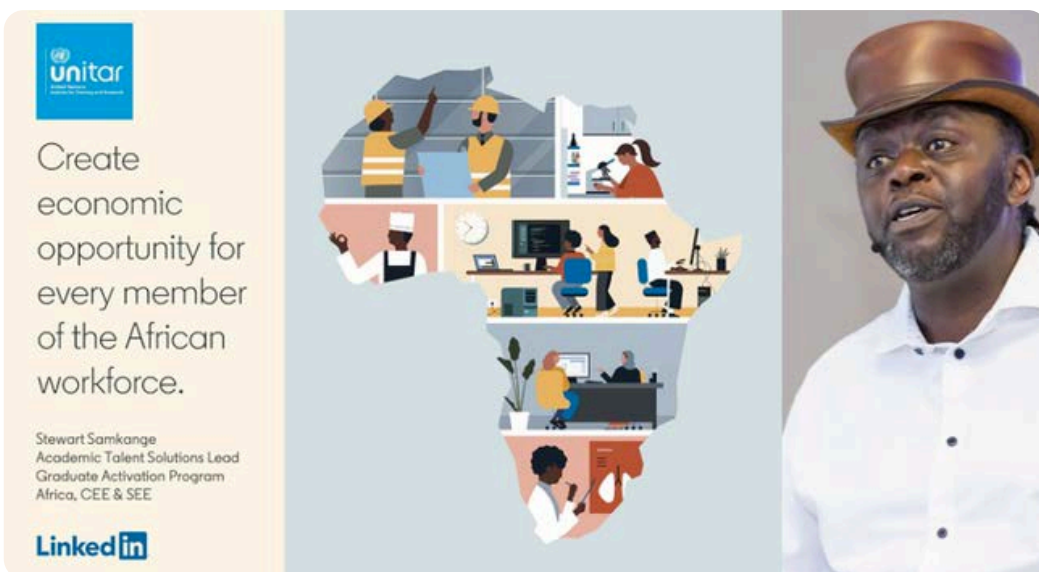
Esther Kinuthi – Global Project manager- Ex Google, Ex Tiktok, Ex Meta, Ex-Oracle

"It was very inspiring and energising collaborating with Stewart Samkange from LinkedIn and United Nations Institute for Training and Research (UNITAR) to empower thousands of African youth with the skills required for Career Advancement.

A unique collaboration between IFC - International Finance Corporation and Google, states that Africa has the potential to reach $180 billion by 2025, accounting for 5.2% of the continent's gross domestic product (GDP). By 2050, the projected potential contribution could reach $712 billion, 8.5% of the continent's GDP. KORRE, LinkedIn and UNITAR are playing their role in making this happen!

The talent in Africa is strong and ready for work."
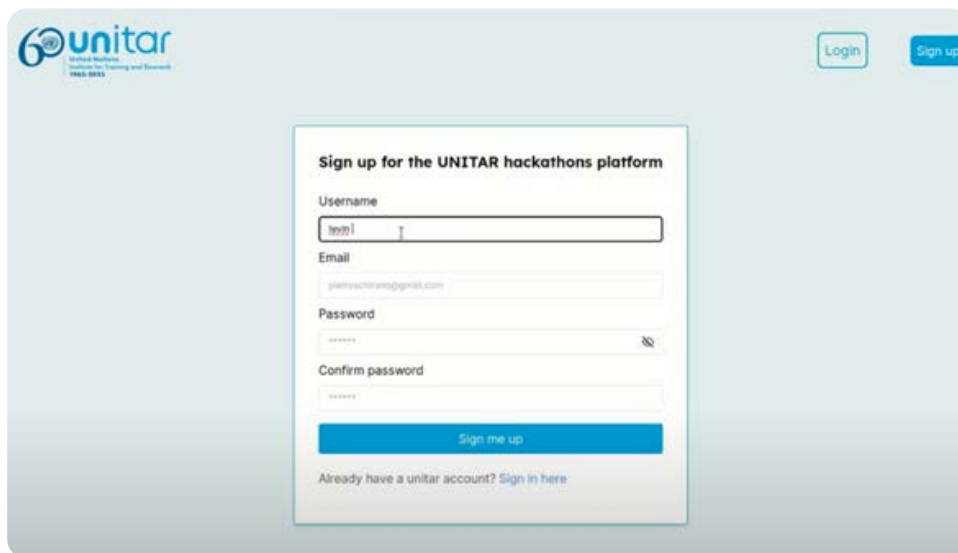
Phases II & III progress

Upon the completion of Phase I and Phase II webinars for "Developing Essential Digital Skills for Women and Youth in Africa: Enhancing Employment Opportunities and Livelihood Development in the Digital Economy," participants from IBM and Microsoft tracks who successfully completed Phase I received notifications outlining the next steps. This included participation in a hackathon or virtual boot camp, which was discussed during a sensitization and information session.

Phase II commenced with a focus on applying the knowledge gained, featuring engaging hackathon challenges. Participants were tasked with using the skills acquired in Phase I to address specific challenges relevant to their country's context. To facilitate this process, a dedicated platform, platform.unitar-hackathons.org, was developed. Participants were required to set up profiles using the same name used during their programme onboarding. Upon successful profile creation, learners self-identified based on their allocated tracks (e.g., Microsoft Foundational, IBM Upskilling) and received a verification code to activate their accounts.

Following verification, participants selected a hackathon theme that aligned with their skills and interests. Each theme included sub-themes aimed at addressing specific contextual challenges and promoting innovation and collaboration among participants.

The self-led projects gave the participants an opportunity to do it as an individual or team project, but only the team leader was able to submit and pitch the solution.

The self-led projects encompassed a diverse range of solutions submitted as website portals, apps, pitch decks, business plans, video presentations, and existing minimum viable products. These tech-driven or tech-enabled solutions aimed to address various social issues within the target countries. The programme's primary objective was to boost participants' employability and promote entrepreneurship through innovative approaches. Some of the challenges tackled by these projects included:

a) **Employment and Livelihoods Development:**
  - Entrepreneurship and MSME Development
  - Skills Development and Training
  - Rural Livelihood Development
  - Economic Empowerment
  - Financial Inclusion and Empowerment

b) **Emerging Technologies:**
  - Skills Development and Training
  - Green Livelihoods Development
  - Digital Inclusion and Skills Development
  - Community and Social Impact

c) **Social Impact:**
  - Women and Youth Empowerment
  - Community and Social Impact
  - Cooperative Models and Social Enterprises
  - Health & Sustainable Development Goals (SDGs)
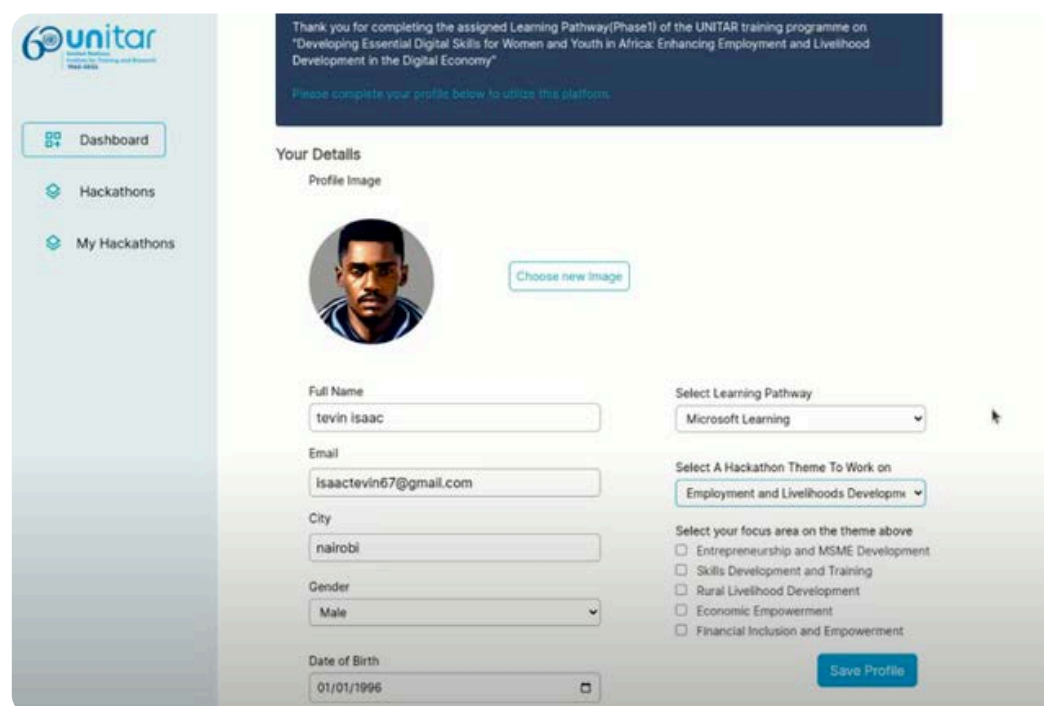 - Inclusion of PWDs and Underserved Communities

d) **Climate Change - Green Livelihoods:**
  - Green Livelihoods Development
  - Sustainable Development Goals (SDGs)
  - Food Security and Systems

e) **Accessibility and Inclusion:**
  - Digital Inclusion & Skills Development
  - Inclusion of PWDs and Underserved Communities

All submitted projects underwent rigorous evaluation based on strict criteria, with input from both technical partners and the UNITAR team. This process culminated in the awarding of the participants' Digital Skills Programme & Hackathon Certificate of Completion. Furthermore, UNITAR and its partners identified and celebrated the top 25 projects during Phase III.

The hackathon evaluation criteria encompassed the following aspects:

- **Alignment with Program Objectives:** Projects were evaluated based on how well they aligned with the overarching goals of enhancing digital skills for women and youth in Africa.
- **Innovation:** The level of creativity and originality demonstrated by each project was assessed, emphasizing novel approaches to addressing challenges.
- **Feasibility:** Evaluators considered the practicality and feasibility of implementing each project within the given context, including available resources.
- **Impact:** The potential positive impact of the project on empowering the community, particularly women and youth, within the digital economy was analyzed.
- **Scalability:** Preference was given to projects that exhibited potential for scalability and replication in other contexts or regions.
- **Sustainability:** The long-term sustainability of the project outcomes beyond the duration of the program was taken into account.
- **Technology Integration:** The extent to which projects utilized digital technologies and platforms to achieve their goals was assessed.
- **Youth and Women Focus:** Projects led by or specifically benefiting youth and women were given special consideration, with an emphasis on job creation and economic empowerment.
- **Bankability:** Evaluators considered the readiness of projects for investment, including the clarity of financial projections, working capital needs, and overall business viability.

These criteria ensured that the evaluation process was comprehensive, focusing on both the immediate impact and long-term viability of the projects developed during the hackathon.

Women and Youth led Projects

Women led Projects — 63.7% — Women led Projects — 580

Youth led Projects — 36.3% — Youth led projects — 330

Key Observations

In Phase II of the program, it was observed that a few participants submitted empty profiles initially. Immediate notifications were sent to prompt them to update their submissions. Additionally, a small percentage of submissions were incomplete, lacking essential information required for evaluation, and some duplicates were identified. Participants were promptly notified to provide real-time feedback and rectify any issues with their submissions.

Regarding the quality and diversity of the submissions, they were commendable, showcasing a wide range of innovativeness, out-of-the-box thinking, and application of skills learned during Phases I and II of the program. Overall, countries with high mobile and internet connectivity such as Kenya, South Africa, Ghana, and Nigeria showed strong initiative and ideas. Efforts were made to balance gender and country representation by aiming to select at least one project from each target country, ensuring equal opportunities for women and youth. Solutions addressing immediate regional needs, such as robotics or AI for development, were also highlighted.
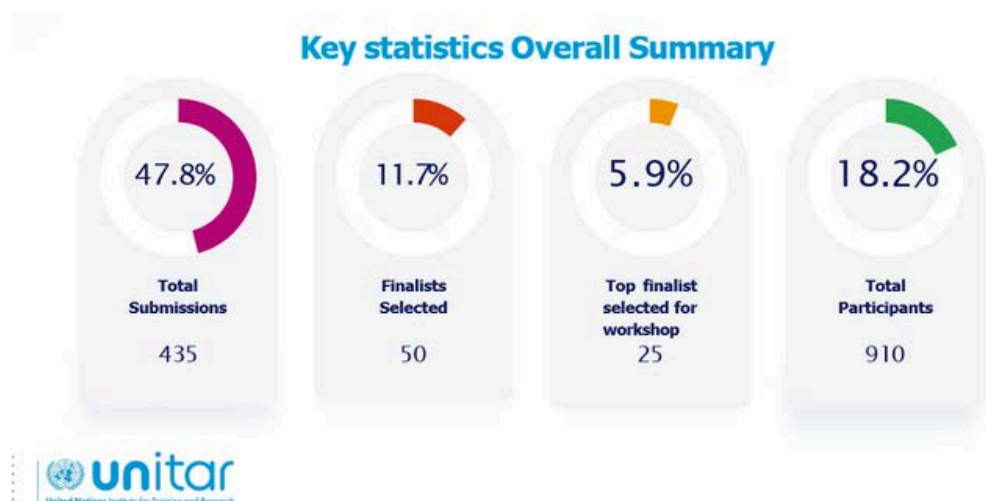
The distribution of projects and initiatives across different learning pathways from IBM and Microsoft demonstrated strong potential for collaboration. The graphical representation below illustrates the country distribution, key observations, and distribution of projects and initiatives:

Partipants enrolled from each country
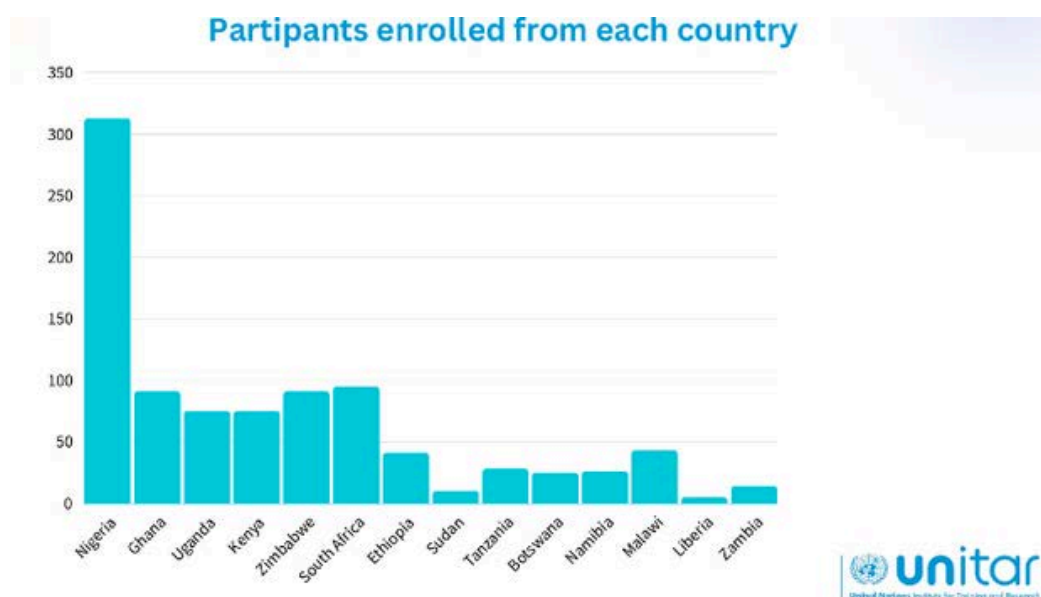
The evaluation identified numerous outstanding projects that introduced creative and innovative approaches to enhancing digital skills for women and youth across Africa. The selected finalists demonstrated significant potential to effect positive change in the digital realm. Following their selection, finalists were provided opportunities to further develop and refine their projects. They participated in both online and in-person workshops designed to enhance their skills and refine their presentations. Subsequently, successful participants were notified via email and engaged in pitching sessions and business model classes aimed at refining their innovations prior to the final graduation ceremony.

At the graduation ceremony held in Nairobi, Kenya, finalists presented their refined projects to esteemed industry guests, including UNITAR staff, representatives from Japanese corporations and the Embassy of Japan in Kenya, MasterCard Foundation, IBM, Microsoft, Ministry of ICT Kenya, and other industry leaders and ecosystem enablers. The pitching process has resulted in significant progress for many projects across various sectors. The overall quality and quantity of projects that met the evaluation criteria underscored the program's success in fostering impactful innovations and empowering youth and women in Africa through enhanced digital skills.

Key statistics Overall Summary

47.8%	11.7%	5.9%	18.2%
Total Submissions	Finalists Selected	Top finalist selected for workshop	Total Participants
435	50	25	910

The theme that received the highest number of submissions was employment and livelihood development, underscoring the program's impact on job readiness and employability. Following closely was the theme of emerging technologies, demonstrating how projects leveraged advancements like AI, machine learning, and cybersecurity to achieve their outcomes.

Project distribution by theme

Hackathon	Number of submissions
Emerging Technologies	100
Accessibility and Inclusion	35
Social Impact	105
Climate Change - Green livelihoods	63
Employment and Livelihood Development	132

Participants

39.6%	Microsoft Participants 168
60.4%	IBM Participants 256
18.5%	Total Participants Enrolled 925

Phase III

The final phase of the programme culminated in a graduation ceremony held in Nairobi, Kenya, where the top 25 youth and women from the target countries celebrated their successful completion of the 2023-2024 digital skills training. The ceremony was honored by distinguished guests including Mr. Fumihiro Uchikoshi, Second Secretary of Economic Affairs at the Embassy of Japan's Economic Corporation Section, Ms. Mihoko Kumamoto, Director of UNITAR's Division of Prosperity, Mr. Evans Gichuki, Deputy Director of the Ministry of ICT and Digital Economy, and industry experts from incubators, innovation hubs, ecosystem enablers, and Japanese technology corporations in the edtech sector.

The 2024 graduates of the UNITAR programme are poised to apply their acquired knowledge and skills to drive economic growth within their personal capacities, organizations, communities, and their respective countries at large. This strategic application of skills is crucial for fostering economic development, akin to the technology-driven growth observed in Japan, one of the world's foremost industrialized nations.

Partnerships and collaborative initiatives such as those facilitated by UNITAR are instrumental in translating Kenya's economic development aspirations into tangible outcomes. These include national strategic policies such as Vision 2030, the Big Four Agenda (focused on manufacturing, food security, healthcare, and housing), and the integration of STEM education in school curricula. Without such collaborative efforts, these initiatives risk remaining superficial rhetoric, leaving the populace disillusioned and poverty-stricken amidst changing political landscapes.

Participants and invited guests engaged in a lively debate and open mic forum centered around the theme "Navigating the Future: Learners & Guests Engagement on the Intersection of Emerging Tech, Personal Growth, and Community Impact." During this session, participants had the opportunity to pitch their projects to the guests, receiving valuable feedback aimed at strengthening their business models, enhancing market linkages and strategies, and leveraging available technology to enable their innovations and projects.

The ceremony commenced with an opening address by Ms. Mihoko Kumamoto, Director of the Division for Prosperity, who congratulated the participants on their achievements. She emphasized the importance of ensuring that the initiatives continue to grow and positively impact the participants' respective communities and countries.

A keynote address was delivered by Mr. Fumihiro Uchikoshi, Second Secretary, Commercial and Trade Attaché from the Government of Japan, emphasizing the significance of skilling, upskilling, and reskilling. He congratulated the participants on their accomplishments and encouraged them to explore partnership opportunities with Japanese corporations. The event also featured a deep dive into the theme "Catalyzing Sustainable Growth and Innovation in Africa: A Multilateral Approach to Boosting Women and Youth Employability and Livelihood Development through ICT," followed by speeches from invited guests and ecosystem enablers.

Afterwards, the certificate award ceremony commenced, which was followed by a media briefing. The official closing of the programme was conducted by Mr. Michael Adalla, Programme Specialist.

Some of the distinguished guests included Mr. Evans Gichuki from the Ministry of ICT, Martin Ndlovu representing Microsoft, John Matogo from IBM, and Muchemi Wambugu representing the Mastercard Foundation.

IBM and Microsoft lauded the programme's success, describing it as a unique collaboration and a model worth scaling to continue offering in-demand skills for the fourth industrial revolution to youth and women across Africa. The partners commended UNITAR for its exemplary cooperation from design to implementation, resulting in cutting-edge and impactful innovations from Anglophone Africa. Looking ahead, the partners underscored the importance of connecting the programme's talent pool to global job opportunities, emphasizing the necessity for ongoing training and mentorship to develop top talent into trainers of trainers.

On behalf of the Ministry of ICT and Digital Economy, Mr. Evans delivered remarks on behalf of the Permanent Secretary, H.E. Eng. John Tanui. He emphasized their shared mission on digitalization and highlighted UNITAR's commitment to enhancing digital technology globally. Exploring synergies with Kenya's Ministry of Digital Economy initiatives, he noted, would be beneficial for the programme's sustainability. Mr. Evans also mentioned the government's efforts in establishing digital hubs as innovation platforms for empowerment and community development. He underscored the power of upskilling and reskilling, expressing interest in leveraging both UNITAR and the Ministry's expertise to innovate and empower youth and women for enhanced participation in the digital economy.

Mr. Satoshi Yamawaki from Castalia, a Japanese corporation in the edtech space, echoed the importance of continuous learning and congratulated all the successful participants. He highlighted opportunities for mentorship, particularly for initiatives focusing on skilling girls and youth at a community level.

Some of the participants showcasing their pitches and innovations.

Destina Mensah, a female entrepreneur from Ghana, is a creative designer and communications assistant holding a bachelor's degree in communications. She founded The NEXTIT project with the aim of promoting job creation and livelihood development by supporting both new and existing MSMEs.

Victor Durosaro, a male from Nigeria, is currently studying Electrical and Electronic Engineering. He is passionate about technology, climate change, and entrepreneurship. Victor founded a Smart Irrigation System aimed at revolutionizing farming practices for smallholder farmers in Nigeria, integrating cutting-edge technology with a focus on precision agriculture.

The UNITAR program has been a transformative journey for me. It has not only equipped me with crucial digital skills but has also catalyzed a profound shift in my approach to innovation.

Lucretia Dreyer, a female from South Africa, holds a master's degree in Disability Studies from the University of Cape Town. Her research focuses on adapting educational robotics and coding curricula to ensure that learners with disabilities receive 21st-century skills education in public schools, including special, mainstream, and full-service schools in South Africa.

She founded The Adaptive Inclusive Robotics project, which aims to provide adapted coding and Mindstorms robotics lessons to children with disabilities and socioeconomic vulnerabilities, particularly those facing barriers to education between the ages of 10 and 20.

Inshirah Idris, a female from Sudan, began her professional journey at Wadmedani Ahlia University.

She founded HERAIPATH, a groundbreaking platform reshaping the AI and data science landscape for African women. Emerging in the midst of rapid advancements in these fields, HERAIPATH aims to bridge the gender gap and pave the way for women to excel in their chosen careers.

Dennis Opio, a male from Uganda, is an advocate and social entrepreneur running the NextGen Empowerment Foundation with a theme of "Unleashing Potential, Transforming Lives," a grassroots organization dedicated to bringing joy and hope to the underprivileged through various outreach programs and initiatives.

As a result of the UNITAR programme, he founded the Caring Connections initiative to address the significant challenges faced by youth and women in their community in accessing sustainable employment opportunities and achieving financial independence.

Impact stories from the participants

Dear UNITAR,

I hope this email finds you well. I am Emmanuel MUTABAZI from Rwanda, and I have some exciting news to share! After participating in the UNITAR Training Programme on "Developing Essential Digital Skills for Women and Youth in Africa: Enhancing Employment Opportunities and Livelihood Development in the Digital Economy," I am thrilled to inform you that I have been invited by the International Telecommunication Union (ITU) to attend the Generation Connect Young Leadership Programme (GCYLP) In-Person Training Week 2024, which will be held in Geneva from 10 to 14 June 2024.

I am also pleased to announce that under the ITU-Huawei Generation Connect Young Leadership Programme (GCYLP), our project SANGIZA was one of 30 selected out of more than 5,000 proposed digital development projects to receive funding and support for the 2024-2025 digital development initiative. "SANGIZA - Share it!" is an AI and blockchain-enabled application designed to provide users with security and quality-vetted second-hand electronics, ensuring transparent and secure transactions. The app aims to reduce digital waste, promote sustainable practices, and foster community engagement and digital inclusion. Additionally, SANGIZA incorporates a skills development hub to enhance digital literacy and promote responsible tech practices.

Dear Mr. Adalla, given that I will be in Geneva next week, I would like to take this opportunity to meet with you and discuss a proposal to incorporate Microsoft online courses into our digital training program in Rwanda. I believe this integration could significantly enhance our training offerings and further empower our community.

This is Tigist from Ethiopia. I am a trainee of UNITAR under the Microsoft learning pathway. I attended the LinkedIn webinar, which was incredibly helpful. After completing the UNITAR professional and personal training, I shared what I learned with our staff. It was amazing to engage with high-profile individuals during our workshop titled "Let's Build Our LinkedIn." I am grateful to be an alumna of UNITAR, and my deepest gratitude goes to you and your team as well.


I hope this message finds you well. I am writing to update you on my journey since graduating from UNITAR. My passion for the United Nations and my commitment to continuous learning led me to apply for the highly competitive "HerCyberTracks" program, an initiative by the ITU, a UN agency, designed specifically for women in the cybersecurity field. This program spans five months and aims to empower women by providing specialized training and opportunities in cybersecurity.

Strategic Alignment with SDG's

Outcomes – In Person

All participants, both in person and online, took part in a survey to analyze outcomes and objectives of the programme. Here are some key findings from Phases I, II, and III:

During the survey, it was noted that the majority of respondents were women (74.19%), underscoring the programme's alignment with the international community's objective of advancing gender equality and empowering women, as outlined in Sustainable Development Goal 5. In terms of participant demographics from the in-person survey, a significant portion hailed from the private sector, followed by academia. This reflects a diverse group, including students and individuals with limited or no work experience, all seeking to enhance their job readiness through the programme.
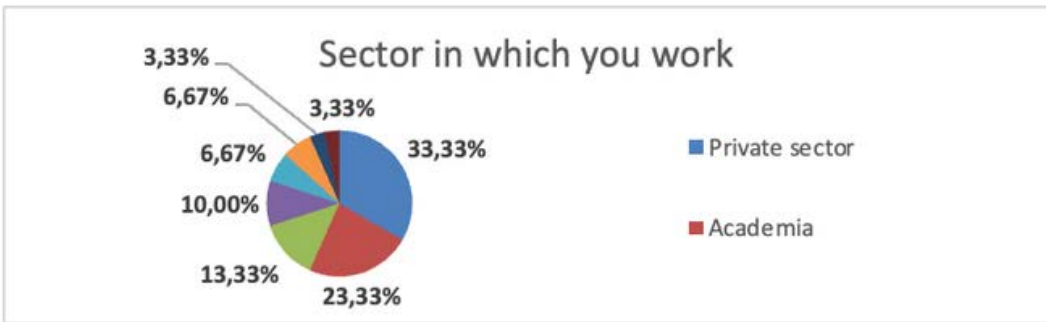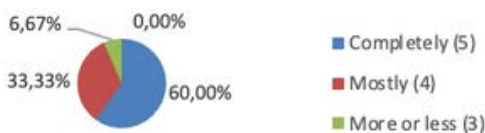

At the conclusion of each phase and at the end of the programme, participants were invited to complete a survey aimed at evaluating the course's effectiveness and gathering feedback to enhance future iterations. The following figures summarize the results from an anonymous survey conducted on the final day of the in-person workshop:

Usefulness of the training

Critically review how digital upskilling can enhance employment opportunities
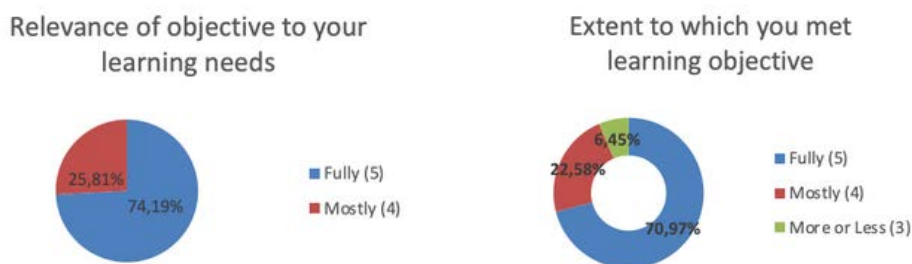
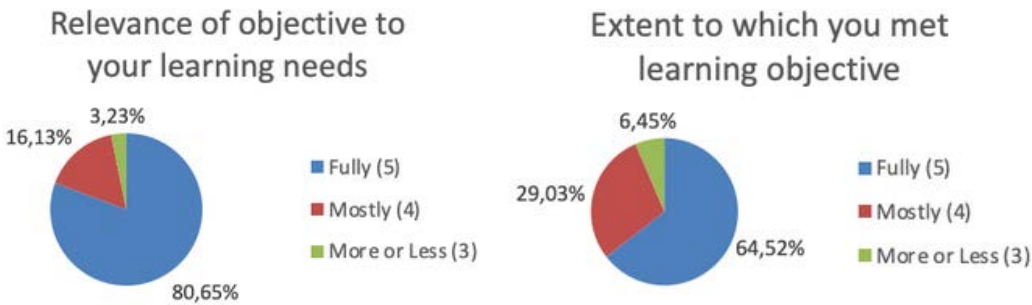Majority of the participants confirmed their learning needs were met.

Relevance of objective to your learning needs

3,23%
25,81%
70,97%
- Fully (5)
- Mostly (4)
- More or Less (3)

Extent to which you met learning objective

3,23%
38,71%
58,06%
- Fully (5)
- Mostly (4)
- More or Less (3)

Critically reviews the relation between digital technologies and sustainable economic growth

Relevance of objective to your learning needs

25,81%
74,19%
- Fully (5)
- Mostly (4)

Extent to which you met learning objective
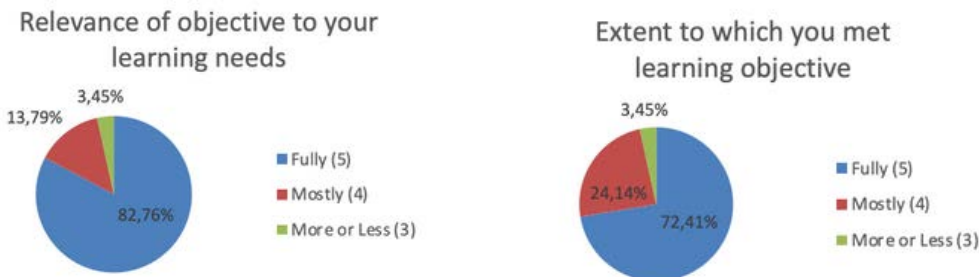
6,45%
22,58%
70,97%
- Fully (5)
- Mostly (4)
- More or Less (3)

Demonstrate critical thinking skills to develop strategies to facilitate knowledge-building in the digital sector

Relevance of objective to your learning needs
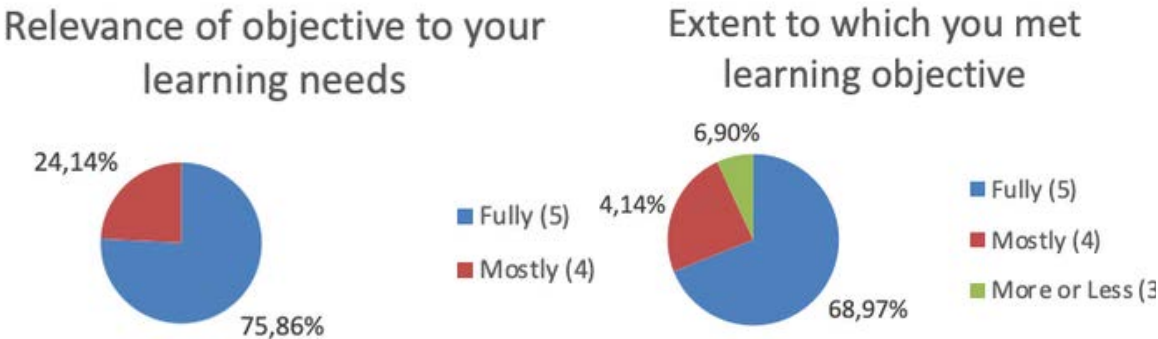
3,33% 0,00%
13,33%
83,33%
- Fully (5)
- Mostly (4)
- Partially (2)

Extent to which you met learning objective

3,23%
25,81%
70,97%
- Fully (5)
- Mostly (4)
- More or Less (3)

Use digital skills including identifying issues relating to data quality, ethics, privacy and security

Relevance of objective to your learning needs

16,13%
3,23%
80,65%

- Fully (5)
- Mostly (4)
- More or Less (3)

Extent to which you met learning objective

6,45%
29,03%
64,52%

- Fully (5)
- Mostly (4)
- More or Less (3)

Understand practices of computer-supported collaborative learning and knowledge-building pedagogies for training of other innovators
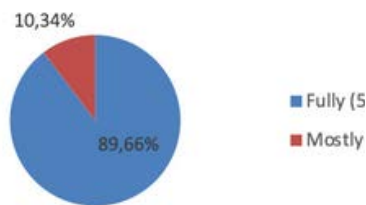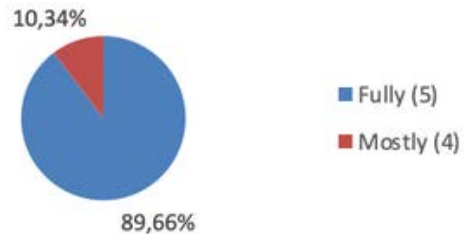
Relevance of objective to your learning needs

13,79%
3,45%
82,76%

- Fully (5)
- Mostly (4)
- More or Less (3)

Extent to which you met learning objective

3,45%
24,14%
72,41%

- Fully (5)
- Mostly (4)
- More or Less (3)

Use leadership skills to drive change

Relevance of objective to your learning needs

24,14%
75,86%

- Fully (5)
- Mostly (4)

Extent to which you met learning objective

6,90%
4,14%
68,97%

- Fully (5)
- Mostly (4)
- More or Less (3)

Demonstrate self-awareness, curiosity, and strategic thinking
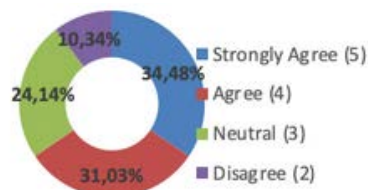
Relevance of objective to your learning needs

10,34%
89,66%

- Fully (5
- Mostly

Extent to which you met learning objective

10,34%

- Fully (5)
- Mostly (4)

89,66%

Training content

The information presented in this training programme was new to me

10,34%
34,48%
24,14%
31,03%

- Strongly Agree (5)
- Agree (4)
- Neutral (3)
- Disagree (2)

The content of the training programme was relevant to my job or livelihood

6,90%
6,90%
86,21%

- Strongly Agree (5)
- Agree (4)
- Neutral (3)

It is likely that I will use the information acquired

10,71%
89,29%

- Strongly Agree (5)
- Agree (4)

The training programme's methodology was useful given the learning objectives

17,24%
82,76%

- Strongly Agree (5)
- Agree (4)

Effectiveness in presenting information
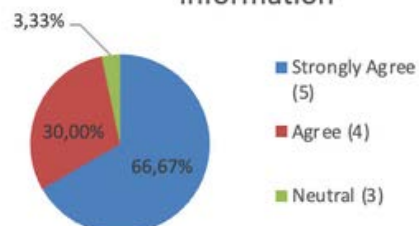
3,33%
30,00%
66,67%

- Strongly Agree (5)
- Agree (4)
- Neutral (3)

Effectiveness in responding to questions of participants

13,33%
30,00%
56,67%

- Strongly Agree (5)
- Agree (4)
- Neutral (3)

Effectiveness in responding to questions of participants

13,33%
30,00%
56,67%

- Strongly Agree (5)
- Agree (4)
- Neutral (3)
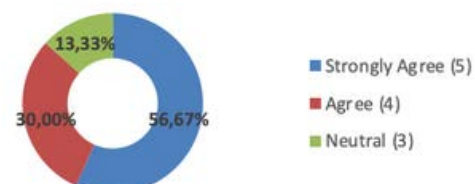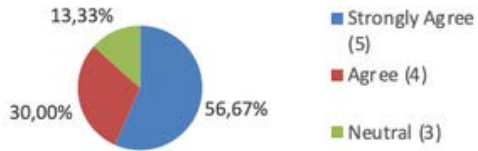
Effectiveness in stimulating participant involvement

10,00%
23,33%
66,67%

- Strongly Agree (5)
- Agree (4)
- Neutral (3)
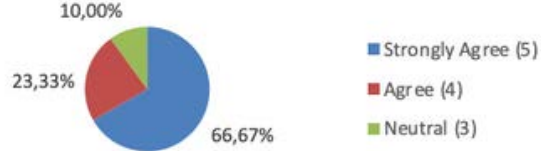
How useful was (were) the method(s) in helping you to achieeve the...
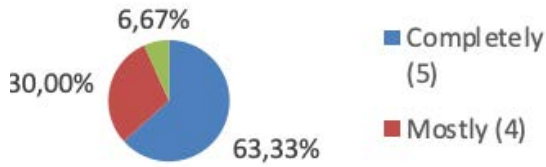
6,67%
30,00%
63,33%

- Completely (5)
- Mostly (4)

The training programme was useful

13,33%
86,67%

- Strongly Agree (5)
- Agree (4)

## I will recommend this training programme to a colleague.

- Strongly Agree (5)

ANNEXES

Measuring learning outcomes: Overall satisfaction with the course

This section contains participants' feedback based on the analysis of the post-course survey. The participants were asked to rate their knowledge on a variety of parameters before and after the training programme.
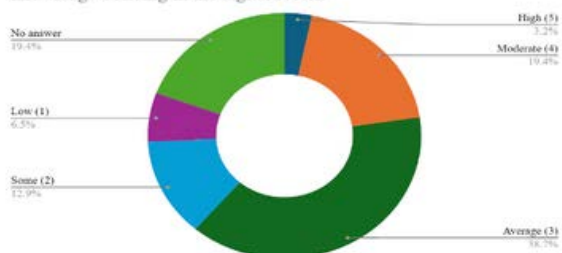

Critically review how digital upskilling can enhance employment oppotunities
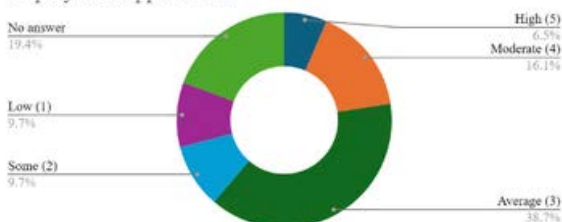
Critically review the relationship between digital technologies and sustainable economic growth
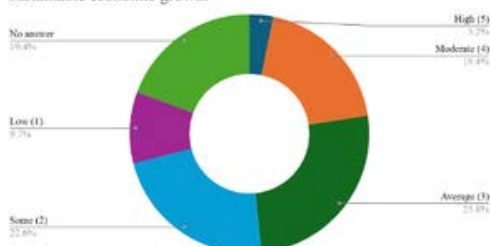
Demonstrate critical thinking skills to develop strategies knowledge-building in the digital sector.

Use digital skills including identifying issues relating to data quality, ethics, privacy and security

Understand practices of computer-supported collaborative learning and knowledge-building pedagogies for training of other innovators.
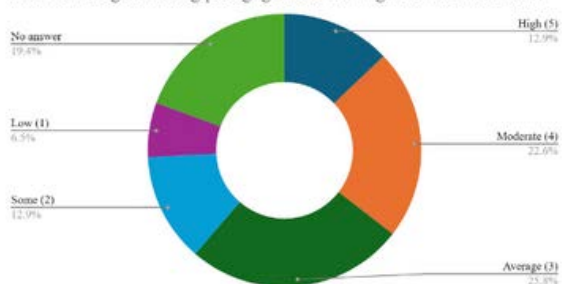
Use leadership skills to drive change

Demonstrate self-awareness, curiosity, strategic thinking, teamwork and sensitivity to the needs of society

Outcomes – In Person

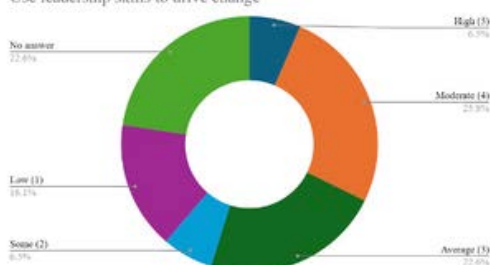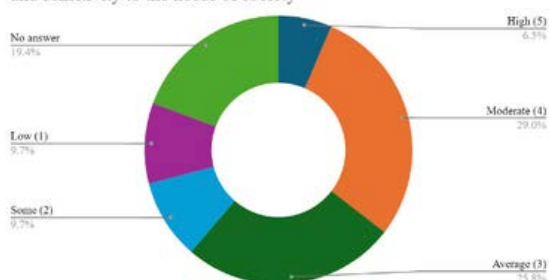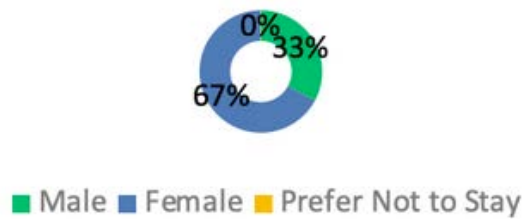All participants both in person and online participated in a survey and below are some of the analysis against outcomes and objectives of the programme.

0%
33%
67%

■ Male ■ Female ■ Prefer Not to Stay

Phases I, II, and III

Of the accepted participants who completed the survey, 67% were women, while the remaining 33% were men. This distribution underscores the program's commitment to advancing gender equality and women's empowerment, aligning with Sustainable Development Goal 5, a key objective of the international community.

In addition, it was found that most were from the private sector, followed by academia. This demographic composition resulted in a significant number of students or participants with limited to no work experience, aiming to improve their job readiness. The majority of these participants were enrolled in the foundational learning pathway, reflecting their lack of work experience and their entrepreneurial ambitions.

Please select the sector in which you work.

8% 3%
3%
5%
20%
32%
16% 1% 3%

■ Central/National government

■ State/Provincial government

■ Local government/authorities

■ International/regional Organisation

■ Nongovernmental Organisation

■ Private Sector

■ Academia
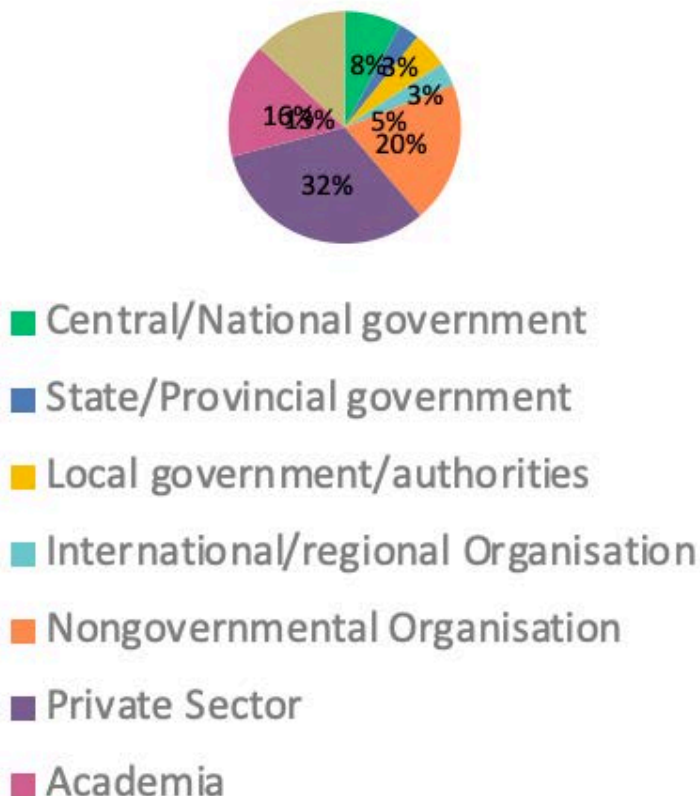
	FOUNDATIONAL	UPSKILLING	INDUSTRY SPECIFIC	TOTAL	WEIGHTED AVERAGE
IBM	52.90% 292	35.33% 195	11.78% 65	552	1.59
Microsoft	53.96% 286	37.17% 197	8.87% 47	530	1.55

Please tick the programme phase completed & proof of completion uploaded (Select all that apply)
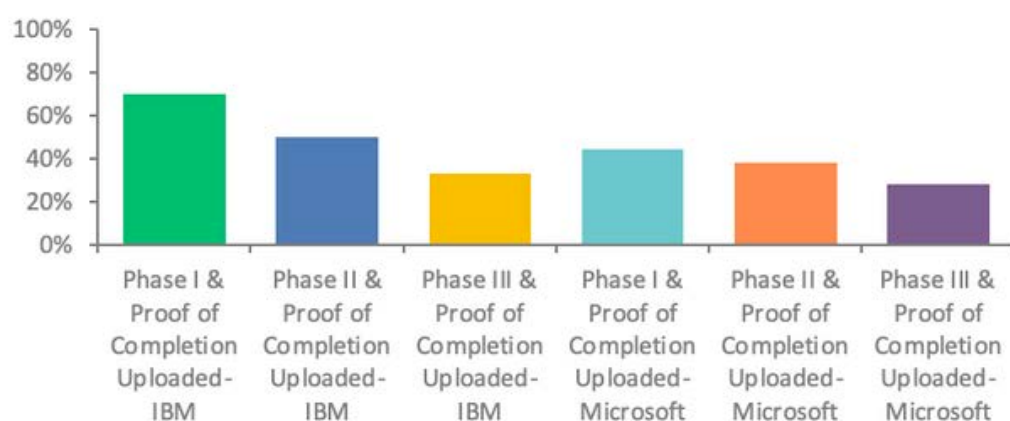
The majority of the IBM participants completed phases I and II, with over 69.68% and 49.84% of the Microsoft participants reporting to have completed the same. Out of all the participants, 32.74% and 27.74% reported to have finished up to phase III.

Annexes

Please rate the degree to which the track allocated and training programme met your expectations

Please rate the degree to which the technical support from IBM and Microsoft met your expectations

Legend: Completely · Mostly · More or Less · Partially · Not at all · Not Applicable

Categories:
- Useful in providing in demand skills for my career aspirations
- Useful in providing in demand skills for my innovation and entrepreneurial journey
- Useful in providing skills to an existing or new idea and innovation

Critically review how digital skilling, reskilling and upskilling can enhance employment and livelihood opportunities.

Categories:
- Relevance of objective to your learning needs
- Extent to which you met learning objective

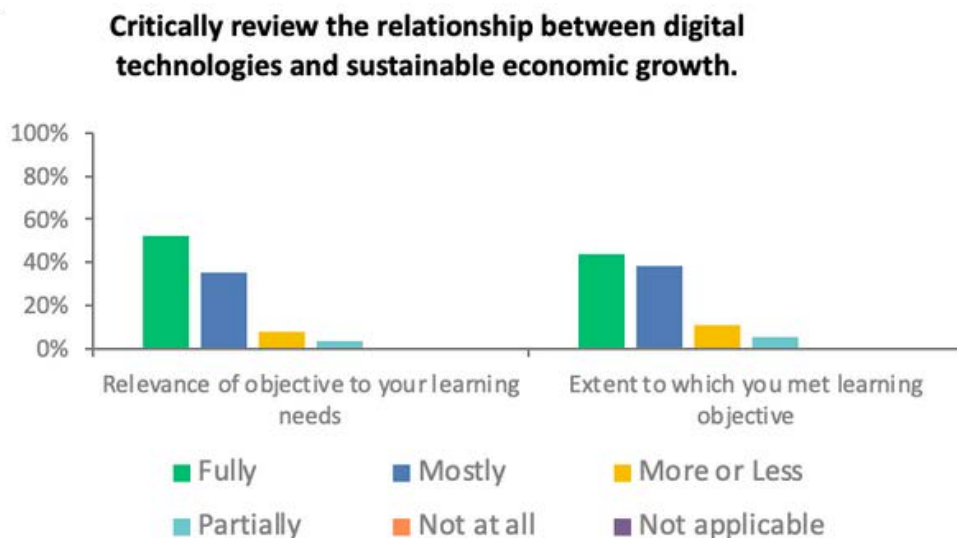**Legend:** Fully · Mostly · More or Less · Partially · Not at all · Not applicable

Critically review the relationship between digital technologies and sustainable economic growth.

Categories:
- Relevance of objective to your learning needs
- Extent to which you met learning objective

Legend: Fully · Mostly · More or Less · Partially · Not at all · Not applicable

Use critical thinking and digital skills to develop strategies to facilitate knowledge-building and to identify issues relating to data quality, ethics, privacy and security

Legend: Fully · Mostly · More or less · Partially · Not at all · Not Applicable

Understand practices of computer-supported collaborative learning and knowledge-building pedagogies for training of other innovators.

Legend: Fully · Mostly · More or less · Partially · Not at all · Not Applicable
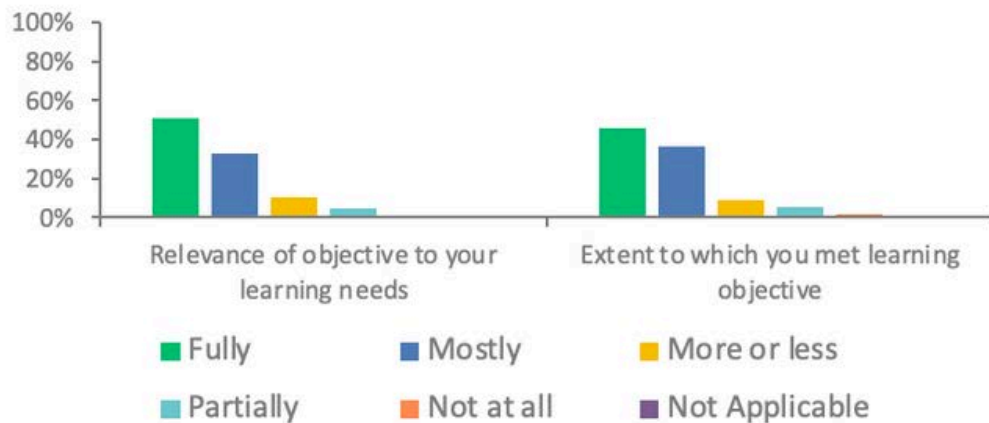
Use leadership skills to drive change through self-awareness, curiosity, strategic thinking, teamwork and sensitivity to the needs of society

Legend: Fully · Mostly · More or less · Partially · Not at all · Not Applicable

Please rate the following statements using the numerical scale from Strongly agree (5) to Strongly disagree (1).

Strong Agree ■ Agree ■ Neutral ■
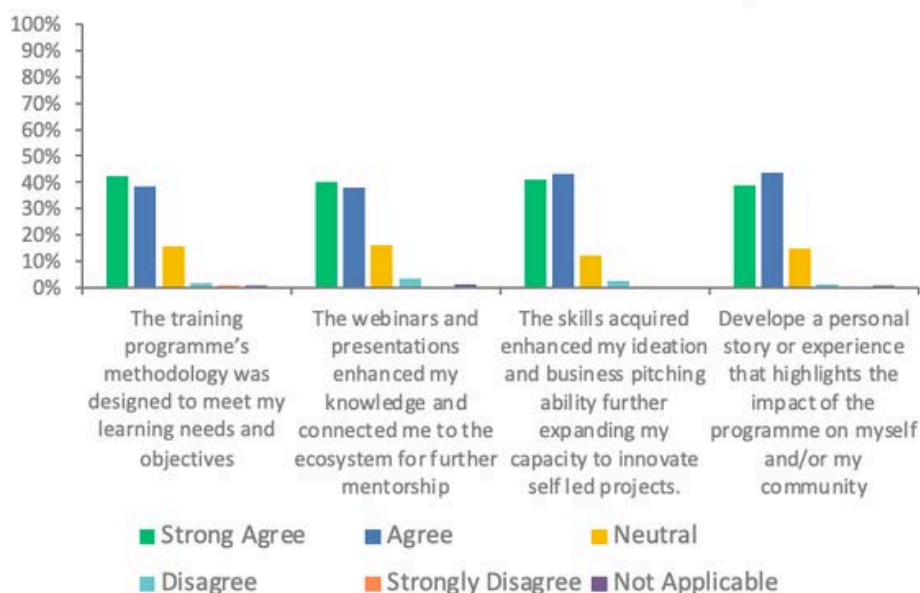**Disagree ■ Strongly Disagree ■ Not Applicable ■**
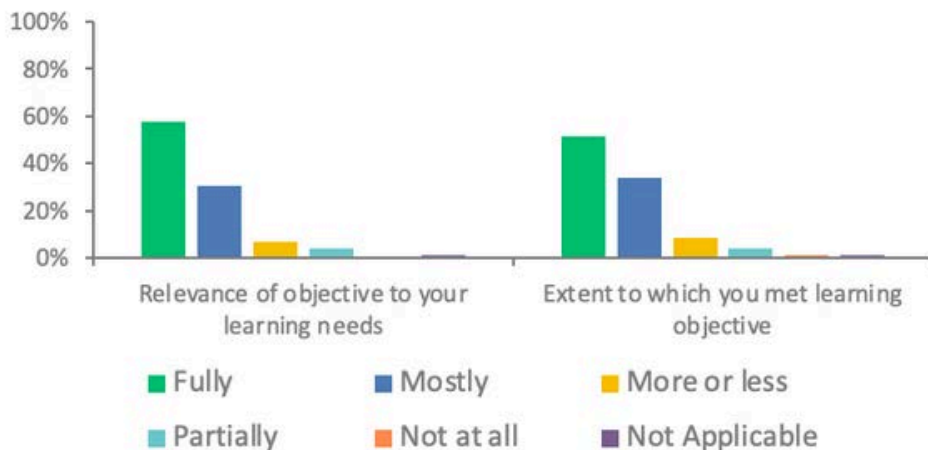
The methodology used in this training programme included Webinars, Presentations, Peer reviews, Entrepreneurs Case Studies, self-led projects development and pitching.

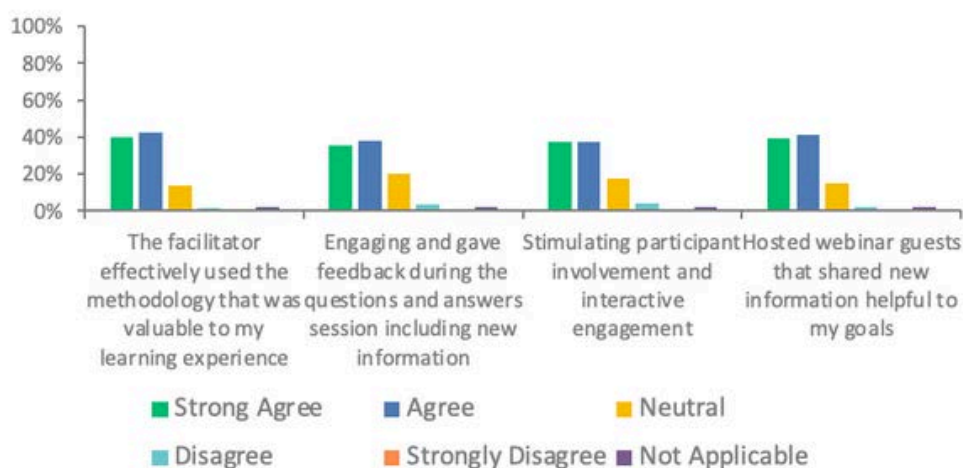**Strong Agree ■ Agree ■ Neutral ■**
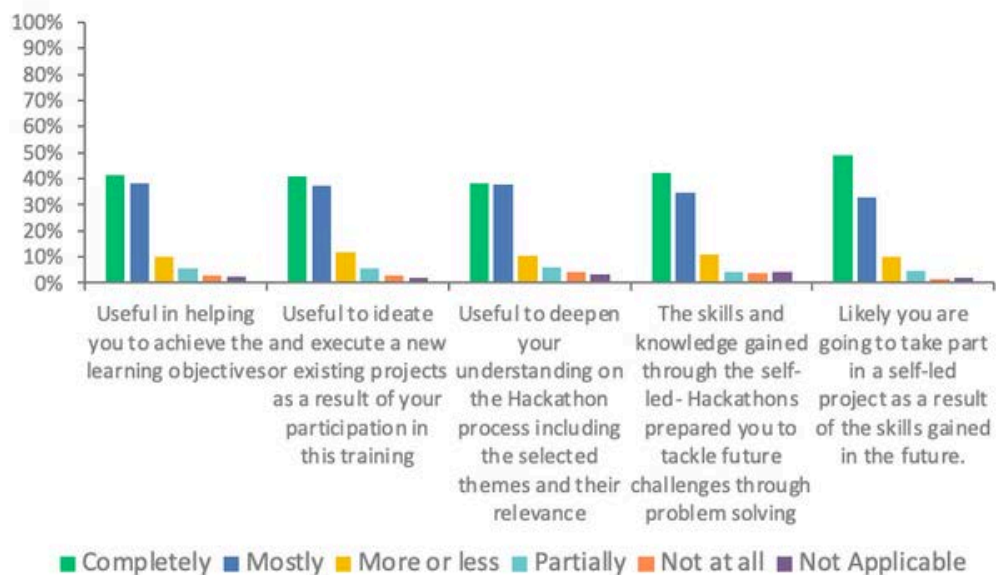**Disagree ■ Strongly Disagree ■ Not Applicable ■**

Please rate the following statements using the numerical scale from strongly agree (5) to strongly disagree (1). The trainer(s)/facilitator(s) was (were) effective at
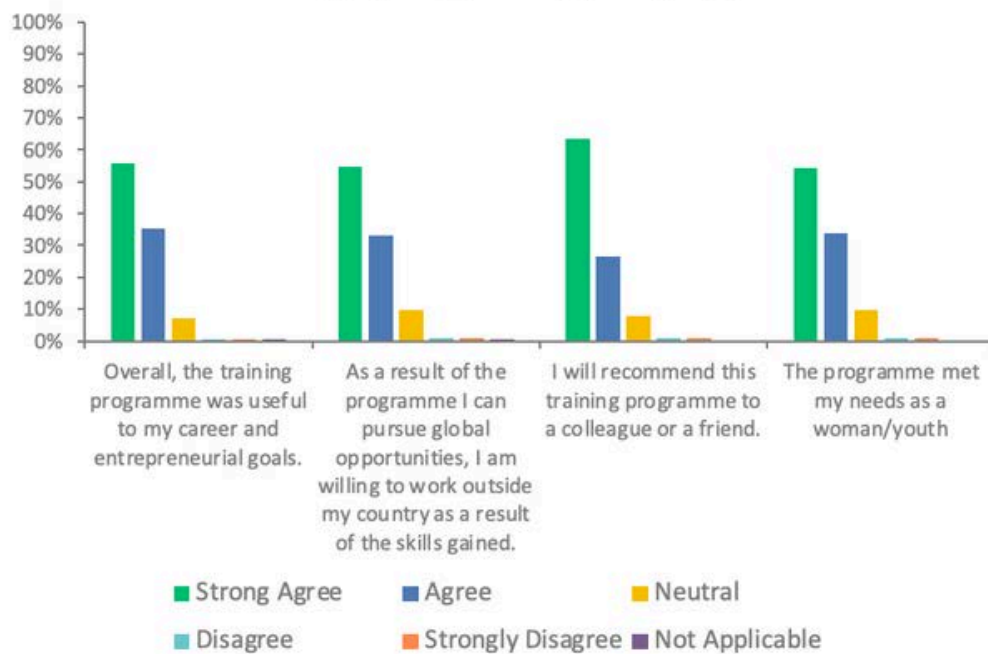

Strong Agree ■ Agree ■ Neutral ■
Disagree ■ Strongly Disagree ■ Not Applicable ■

The assessment of learning included Self-Led, Hackathons and Practical Exercises

Legend: Completely, Mostly, More or less, Partially, Not at all, Not Applicable

Categories:
- Useful in helping you to achieve the learning objectives or as a result of your participation in this training
- Useful to ideate and execute a new existing projects as a result of your participation in this training
- Useful to deepen your understanding on the Hackathon process including the selected themes and their relevance
- The skills and knowledge gained through the self-led- Hackathons prepared you to tackle future challenges through problem solving
- Likely you are going to take part in a self-led project as a result of the skills gained in the future.

Please rate the following statements using the numerical scale from strongly agree (5) to strongly disagree (1).

Legend: Strong Agree, Agree, Neutral, Disagree, Strongly Disagree, Not Applicable

Categories:
- Overall, the training programme was useful to my career and entrepreneurial goals.
- As a result of the programme I can pursue global opportunities, I am willing to work outside my country as a result of the skills gained.
- I will recommend this training programme to a colleague or a friend.
- The programme met my needs as a woman/youth

Are you willing to describe the project that you developed as a result of this programme and the specific needs or challenges it addresses within your community? UNITAR will spotlight your work and give visibility on a dedicated platform.
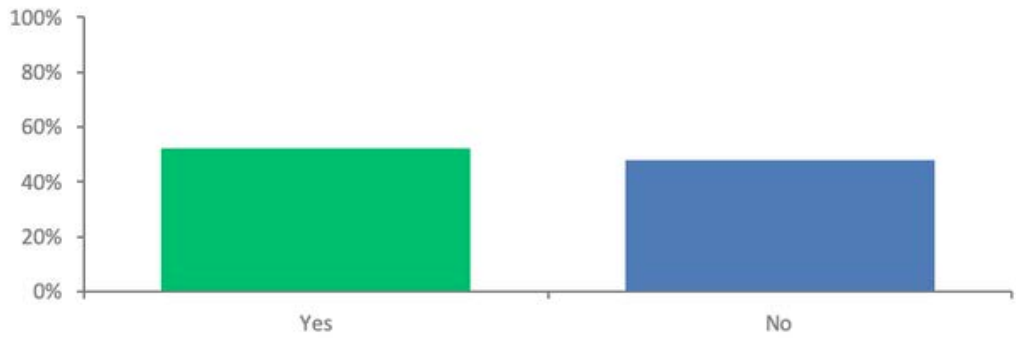
BEFORE -- As a result of this training programme, I can...

Low   Some   Average   Moderate   High

AFTER, As a result of this training programme, I can

Low   Some   Average   Moderate   High
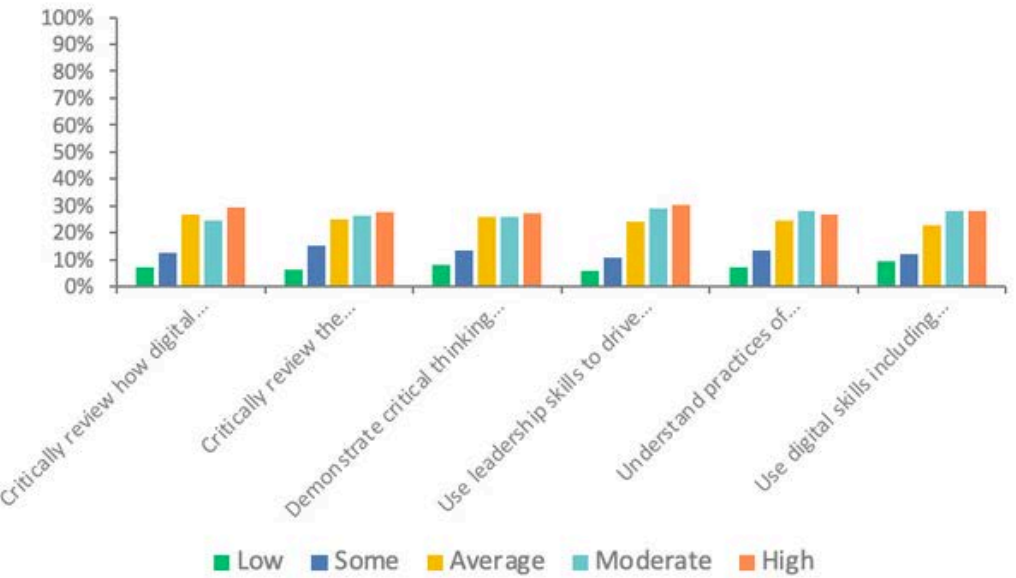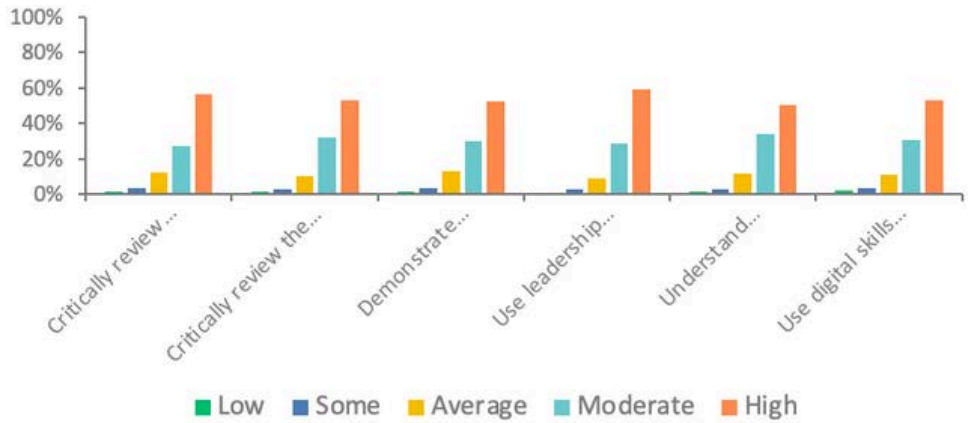
Lessons Learned

Summary of Participants' Feedback

TThis section provides a comprehensive summary of participant feedback gathered from the post-course survey analysis. Participants were asked to reflect on their key takeaways from the training programme and offer recommendations for enhancing its overall impact. They shared insights across various parameters, including their main learnings, interest in additional training topics, and suggestions for program improvements.

One participant highlighted, "My key takeaway is design thinking and mindfulness, equipping me to position myself as a solution to the many challenges facing African development." Another emphasized, "The primary benefit of the programme was learning how to harness technology to solve problems and drive positive change in my society. I acquired practical tools and strategies to enhance digital skills and support development in my region." Another participant noted, "This program was pivotal in catalyzing the inception and implementation of my project by empowering me with digital skills, fostering an entrepreneurial mindset, and promoting community engagement and collaboration."

Furthermore, a participant shared their newfound understanding: "I learned that to validate my startup idea, I must be able to answer three crucial questions: 1. Which problem am I solving? 2. What benefits am I creating? 3. What essential jobs does my product fulfill?"

These reflections underscore the program's impact in equipping participants with practical skills, fostering innovation, and preparing them to address socio-economic challenges effectively.

Participants were also asked about their favorite aspects of the training, and their responses provided valuable insights into their experiences. One participant appreciated, "The insights into new digital skills and technologies that could help me leverage myself to implement my project. The training materials were efficiently delivered, and the content was comprehensive." Another participant highlighted, "I liked the self-paced online learning format, which allowed me to study at any time that suited me. Additionally, the wide range of optional topics to choose from was very beneficial, as they were relevant to various fields and industries."

A participant shared, "Learning how to pitch was a standout for me. It was a challenging yet valuable experience. Moreover, hearing life-changing ideas from industry experts and their personal stories was inspiring and emphasized that we all have to start somewhere." Another participant mentioned their enjoyment of the IBM training approach, stating, "I loved how IBM made the sessions engaging and delivered the content effectively." These reflections underscore the diversity of learning experiences and the effectiveness of the training program in meeting participants' expectations and needs.

Participants also provided insights into additional training topics they believe UNITAR should offer and explained their reasoning: "I suggest UNITAR should provide more training on sustainable development. This would help us grasp the importance of balancing economic, social, and environmental factors for long-term success. Given the high levels of conflict across our continent, I also recommend courses on conflict resolution and peacebuilding, focusing on the impact these can have on youth and women."

Additional comments include: "I advocate for coding opportunities to empower us to create real-time solutions."

"UNITAR should include topics that integrate digital skills with practical applications, such as construction work."

"I believe UNITAR should expand its training programs to include more youth, not just concentrating on women. Many individuals still lack awareness of and access to such opportunities."

These suggestions underscore the participants' diverse interests and emphasize the importance of practical skills, sustainable development, conflict resolution, and broader accessibility to training programs.

Participants also offered constructive comments and suggestions for improving the program:

"I appreciate attending this program, and I suggest incorporating expanded mentoring opportunities into the training. This would provide us with support and guidance from experienced professionals in the field."

"I recommend that UNITAR courses should be available as downloadable files. This would allow participants to refer to the materials offline whenever needed."

"I am genuinely grateful to UNITAR and all their partners. This opportunity was valuable, and I am confident that the skills gained will bear fruit. It was definitely not a waste of time."

"Thank you for this life-changing experience. I recommend adding more training on upcoming emerging technologies, tailored to the technological landscape of each country."

These suggestions reflect participants' desires for ongoing support, accessibility of learning materials, gratitude for the program's impact, and suggestions for expanding training content to include emerging technologies relevant to local contexts.