### Women in Digital Technology in Yemen

### **Factors for Empowering Women in the Field of Technology**

**Technological Transformation and its Impact on the Lives of Yemeni Women** 

Issue: 17

Pages: 20

Price: Free 15 / 11 / 2023



Defying Disability in the World of Technology

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Empowering Women in Yemen: Private Sector's Vital Role in Technology Training and Economic Empowerment Civil Society Organizations Continue to be Yemeni Women's Gateway to the Digital Technology Realm Yemeni Women in the Technological Job Market: Training Opportunities and Occupational Hurdles

## Yemeni Women Forge New Frontiers Through Digital Transformation

Abrar found herself in a pressing situation - she urgently needed to transfer her university research from her phone to paper in order to submit it as a homework assignment to her specialist professor. As she searched through her lecture notebook, she realized that it was filled to the brim with notes and writings, leaving no room for her research. Frustrated, she pondered the fate of these worn-out papers, which had become surplus to her home library's needs. She couldn't help but wonder about the countless imported papers that were used once and then discarded.

By: Haneen Al-Wahsh Women in Development and Peace

«Why is there no way to recycle this paper and give it a new purpose?" Abrar wondered silently. Initially, she dismissed the thought as absurd, but her curiosity persisted, especially after she forgot to bring paper for her assignment. When her colleagues joined her at the lecture hall, she shared her question with them. To her surprise, seven female students had also contemplated the same idea, and together they embarked on a challenging endeavor. Each of them independently brainstormed ways to recycle paper, ultimately deciding to make it their university graduation project.

Fast forward to the present year, 2023, and Abrar Al-Jaafari has successfully graduated from Sana'a University's Department of Mechatronics. Alongside her seven colleagues, she invented a project that revolutionized paper recycling, making damaged paper reusable. Abrar explains, "Our project was met with great enthusiasm and achieved remarkable success. Our primary objective was to reduce paper imports, which motivated us to further develop the project beyond recycling and explore the possibility of creating new paper from damaged ones."

Choosing the field of Mechatronics stemmed from Abrar's passion for technology and programming. She highlights how this field combines her love for technology and programming with other scientific disciplines, particularly information and knowledge that she acquired through her explorations on the internet. Abrar emphasizes the internet's transformative role in her life, stating, "The internet is an infinite source of learning and development for me. It has helped me discover my abilities and continuously enhances them. It was my primary tool for learning and reading, surpassing the limitations of my university curriculum and courses."

### **Digital Literacy**

The advent of internet technology has not only provided Yemeni women with a means to break free from captivity but has also offered them essential tools for communication, learning, and cultural assimilation. This technology has become their primary knowledge repository, acting as a cultural ladder that leads to literary advancement and access to world-renowned libraries. Heba Abdulraqeeb, a writer, describes her own experience, stating, "Since childhood, I have been passio*continue ....page2* 





nate about reading. As a woman from the countryside, obtaining novels and intellectual books was challenging. Even in the city, particularly Taiz, there was a notable absence of prominent literary works."

During her first visit to an internet café, Heba managed to download a staggering five hundred novels. Recalling that moment in 2015, she reminisces, "At that time, I felt like I owned the world."

Heba's enthusiasm for literature led her to create a WhatsApp group with like-minded colleagues. They would share and discuss the latest e-books they had read and admired. Reflecting on this experience, Heba concludes, "Without this technological resource, my friends and I would have remained oblivious to the works of poets like Abdullah Al-Baradouni or novelists like Gabriel Marquez."

### **Online Shopping**

Umm Omar plays a crucial role as an intermediary for Yemeni women on the Shein online shopping and selling application. Through a WhatsApp group link, she effectively promotes new products on the platform, allowing users to place orders. Umm Omar then imports the requested items and arranges for their delivery to customers' homes, charging a nominal fee for the service.

Speaking about her work, Umm Omar explains, "I maintain active groups on popular social media platforms such as WhatsApp, Instagram, and Telegram. These accounts have amassed a significant following, particularly among women interested in the products I offer. By fulfilling their requests and facilitating transactions, I earn a wage that increases proportionally with the rise in orders, even if it may be modest."

Engaging in this trade has empowered Umm Omar to accumulate savings, ultimately enabling her to support her family and secure a decent livelihood. She proudly affirms, "In just one month, I managed to earn approximately one thousand five hundred Saudi Riyals, equivalent to half a million Yemeni Riyals."

### Challenges & Opportunities

In a research paper titled "Women and Technology: Challenges, Opportunities, and the Role of Civil Society Organizations in Empowering Women in the Field of E-Commerce" written for Sana'a University, Dr. Sharaf Mutahar explores the challenges and obstacles faced by Yemeni women in the labor market. The research paper highlights the potential of technology as an ideal solution to overcome these obstacles. It emphasizes the crucial role of civil society organizations in raising awareness, promoting digital literacy, encouraging the use of modern technology systems by male and female workers, and facilitating networking among relevant stakeholders.

One of the obstacles discussed in the research paper is the political challenges faced by women. Dr. Mutahar states, "Despite the inclusion of gender in political gatherings and activities, and the interest of international organizations in involving women in various sectors of their projects, we observe a lack of women's representation in many businesses and projects. Although many women are politically active, they primarily engage through social media and public spheres, and even those who are political activists face difficulties in adapting to technology, which excludes them from the scene."

Additionally, the author addresses the security challenges in Yemen, highlighting that amidst the conflict, both men and women face threats related to security. However, women are particularly vulnerable due to social factors that confine them to safer spaces.

When it comes to social and cultural obstacles, Dr. Mutahar believes that women face numerous challenges in pursuing work outside the home. Society's expectations regarding women's roles primarily revolve around taking care of their children, husband, and household. Consequently, women are expected to play a significant social role in raising children and ensuring their education. Traditionally, men are expected to be the primary breadwinners for the family.

The research paper also highlights successful examples of Yemeni women who have created economic opportunities that have greatly benefited the country and their families. It identifies various obstacles that women encounter in the labor market, including political, security, social, cultural, economic, logistical, financial, and technical challenges.

Furthermore, the research paper emphasizes the opportunities that exist for women in the field of e-commerce. Information technology has proven to be a powerful tool in overcoming challenges and creating local and global opportunities for women. Key opportunities include the widespread availability of the Internet, advancements in science and knowledge, the ability to overcome social challenges, an enabling investment environment, the availability of advanced software, efficient money transfer systems, and the impact of the Covid-19 pandemic, which has forced the world to rely heavily on the Internet.

In terms of the role of civil society organizations, the research paper highlights their importance in raising awareness, promoting and disseminating technology and digital literacy, and preparing women and society for global markets and online engagement. Civil society organizations can play a vital role in enhancing women's participation in technology by encouraging the adoption of technology, supporting women entrepreneurs, promoting digital literacy, and facilitating networking among women entrepreneurs.

In conclusion, the research paper asserts that Yemeni women have demonstrated significant successes in supporting men and building families and society. It recognizes that technological advancements present new opportunities for Yemeni women to benefit from the Internet, actively participate in technical progress, and play pioneering roles in various fields of work, including e-commerce.

### **Factors for Empowering Women in the Field of Digital Technology**

Currently, the field of technology is experiencing remarkable growth and positive advancements. Women are playing a significant and indispensable role in this field, despite encountering numerous challenges. However, there are certain factors that enable them to excel in the realm of digital technology. The purpose of this report is to investigate these factors and examine methods for enhancing the role of women, empowering them in this field.

### By: Afrah Borji Women in Development and Peace

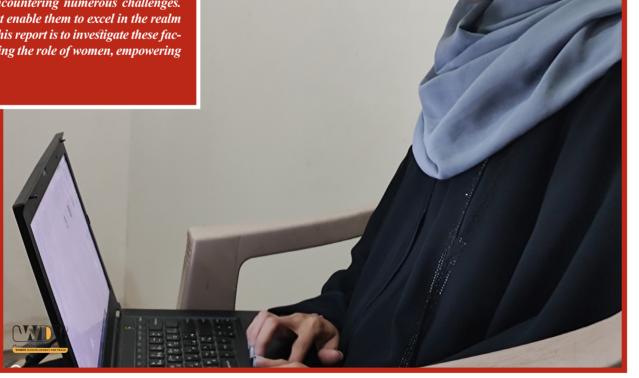
### Institutes' Role in Empowering Women Technologically

Training courses and institutes are major factors in empowering women in the field of technology. In this context, the instructor Mohsen Dosh says, "Training institutes and courses based on training women in technology are among the most important key factors that help women eradicate their illiteracy in the aspect of digital technology. Courses such as computer training, as well as computer systems such as Excel, are some important means of empowering women in the field of technology."

Dosh continues, "One of the most important training courses on digital technology that helps women develop and empower them in this field is mainly computers, followed by training courses in electronic device maintenance, and many other training workshops related to this field, which are very important factors in their empowerment electronically."

### **Girls & Training Courses**

In the same context, Hoda Hussein (18 years old) says, "I completed high school, and it is known to everyone that after this phase there is a year of rest, so I took advantage of the opportunity to join the field of e-learning, and went to register at the New Tech Institute in the city of Hodeidah. I studied many computer training courses so that I can erase the illiteracy that I have in this field, so the institute and the training courses were the biggest factor in eradicating my digital li-



On the other hand, Salwa Al-Mutairi says, "In the villages, we were not able to learn about the computer and its techniques in school, so during summer vacations I used to go to the city of Hodeidah to study computer at the institute, because technology has become one of the most important factors in empowering girls in their journey, from school to university education. Therefore, it is necessary to eradicate women's illiteracy in digital technology, so that they can keep

teracy."

in our lives.'

### Digital Technology Literacy for Women

pace with the technological and scientific

development that has suddenly occurred

Elham Hegazy, a computer professor in a private school, says, "Digital technology is one of the fields witnessing rapid developments at the present time, as digital technology greatly affects all aspects of life, despite this, there are broad difficulties and challenges that encounter women in this field."

She explained that the most important of these challenges is the low percentage of their presence in the digital technology industry, but at the present time we see many women shifting to this field, and now have special projects in digital technology, as well as maintaining computers and mobile devices, and everything related to this sector.

"There are several factors that prevented the empowerment of women in the technological educational aspect, which came from several reasons, including the scarcity of opportunities for education and training in the technological aspect for girls and women. Some in local communities believe that these fields are reserved only for men, which leads to lack of interest among girls and women in engaging in these fields," Hegazy added. Elham points out that some cultural and social challenges have emerged that affect women's participation in the field of technology. In some cultures where social customs and traditions prevail, it is preferable for women to specialize in a specific role without taking their opinion into choosing their life path. But despite these obstacles, Yemeni women are determined to make great efforts to help remove these difficulties and obstacles which women come across, and to further prove their presence and participation in the field of digital technology.

Safaa Rabid, is one of the girls who fought illiteracy in digital technology, and became a secretary in a medical center. Safaa was the first to fight illiteracy in her district. After graduating from high school, she journeyed to the city of Hodeidah to pursue higher education, a dream she had nurtured ever since she saw her older brother, who was three years her senior, owning a laptop. He had achieved this because he held a diploma in computers, which not only greatly influenced her but also inspired her with motivation and determination to continue her journey towards e-learning.

Safaa says, "My studies were not limited only to computer courses, but I turned to this field and began studying at the university, specializing in computers, so that I could realize my dream of having a laptop like my brother. After I completed the four years of study at the university, I started looking for a job, I currently work in the secretarial field in a health center."

### **Other Factors**

Faiza Muhammad, a computer professor at a private institute, said, "Education is the most important factor that empowers girls in the field of digital technology. Studies have shown that women who obtain a higher education in technology are more able to take advantage of the available opportunities and excel in this field. In addition, education gives women self-confidence and the ability to challenge and innovate."

Faiza added, The presence of examples of successful girls in the digital technology sector is also an important factor in empowering women. When a woman sees another woman achieving success in this field, she feels that she is capable of achieving success and overcoming the difficulties in front of her.

Faiza continued: Other factors that empower women in digital technology include raising awareness and removing obstacles rooted in social and cultural customs and traditions that impede their development. This necessitates changing society's stereotypical view of women's role in technology and encouraging their active and innovative participation in the field.

Developing girls in the field of digital technology is important for achieving both economic and social prosperity, through strengthening vocational and technical education through institutes and training courses that sharpen their experience and empowerment in this field, graduating more outstanding feminist models, and removing the difficulties and obstacles they go through. Women can play an effective role that will make them an important focus in developing digital technology and promoting technological progress in local communities across the country.



### Empowering Women in Yemen: Private Sector's Vital Role in Technology Training and Economic Empowerment

Digital technology is a prominent and rapidly evolving sector in the modern era, playing a crucial role in both economic development and individual empowerment. In Yemen, the private sector has emerged as a key player in empowering women through offering training and qualification opportunities in the digital technology field. As a result, private institutions and institutes strive to create an inclusive work environment that enables women to access training and professional growth opportunities, ultimately fostering the diversification of technological skills and expertise.

### By: Ahmed Bajoaim Women in Development and Peace

The advantages of empowering women in digital technology extend to society as a whole, particularly in conservative Yemeni society, as it contributes to sustainable development and social justice. To enhance the involvement of women in the digital technology industry, the private sector has initiated various initiatives. These include providing scholarships specifically for female students pursuing information and communications technology specializations, as well as empowering them economically through the establishment of projects, particularly after their training for the labor market. Consequently, this endeavor leads to achieving diversity and inclusion within the digital technology field.

### **Empowering Women Economically**

Selah Foundation for Development has initiated the "My Profession is in My Hands" project, which focuses on economic empowerment to alleviate current challenging living conditions. With the aim of qualifying and training girls in the field of smart electronic devices, including maintenance, programming, design, montage, and photography, women have played a significant role in this empowerment initiative, ultimately enhancing their participation in the technology and entrepreneurship sectors. The project also aims to develop girls' talents and abilities in electronic devices, protecting them from exploitation and extortion often encountered in youth shops, while contributing to comprehensive societal development, according to project director Mohammed bin Qarawan.

According to statistics provided by Bin Qarawan to Women in Development and Peace newspaper, the "My Profession is in My Hands" project has qualified a total of 160 girls in digital technology programs from 2019 until the beginning of September 2023. Out of this number, 40% have achieved economic empowerment, while 60% have been provided with portfolios to facilitate their entry into the labor market. The program goes beyond training and education, offering technical and professional consultations, as well as additional assistance services such as providing food baskets during training.

Bin Qarawan emphasizes the program's focus on providing high-quality practical and theoretical training. This includes interactive workshops, practical projects, and the utilization of modern educational tools and equipment. The program also creates a supportive and stimulating educational environment, enabling girls to discover their potential, develop skills with confidence and creativity, and encouraging them to initiate their own projects and contribute to entrepreneurship.

Abdullah Muqidhan, the Director of Public Relations at Al-awn Foundation for Development, affirms the Foundation's commitment to empowering women in the digital technology sector. The Foundation has launched multiple projects aimed at encouraging girls and providing them with respectable job opportunities to overcome difficult economic circumstances and improve their income levels. Recognizing the importance of involving women in various sectors and enhancing their education, the Foundation offers training in technical and electronic skills, equipping girls with the necessary tools to establish their own projects.

Muqidhan further explains that these projects contribute to reducing unemployment among girls, alleviating poverty, and elevating family income levels. The project encompasses various programs, including computer maintenance, mobile phone maintenance, website programming, and mobile application programming. Upon completion of these training





### Hashim Al-Aidaroos

programs, the Foundation provides participants with bags and equipment to aid them in launching their own projects.

launching their own projects. In 2022, the project directly benefited 60 girls, while the number of indirect beneficiaries reached 300 girls in Hadhramout Governorate. Participants have formed work teams to establish companies in the digital technology field and have successfully ventured into the commercial market, generating income and financial profits. The establishment of this project by Al-awn Foundation aligns with their objective of empowering educated women economically and creating job opportunities for them through retraining and qualification for the labor market.

### **Institutes Openings**

Hashim Al-Aidaroos, the Director General of the Top Arab Institute for Development and Science in Mukalla, highlights the noticeable improvement in society's awareness of the significance of e-learning for women. This positive shift is evident in the increasing number of girls enrolling in institutes. The institute has responded to this demand by offering various courses in the digital technology field, such as mobile phone maintenance and programming, cybersecurity awareness, programming languages, design and montage, and other related courses. In the year 2023 alone, approximately 3000 trainees, mostly girls, have received training in these areas. Some of these trainees have been economically empowered upon qualification, leading to increased job opportunities for women.

Al-Aidaroos emphasizes that the primary goal of empowering women in digital technology is to ensure privacy and confidentiality. Additionally, it aims to provide job opportunities amidst the challenging economic conditions faced by a large portion of the country's population. He mentions the existence of shops operated by women that specialize in maintaining and programming mobile phones and electronic devices. This achievement is a result of the concerted efforts of the private sector, including institutes, which have worked diligently to make it a success. Al-Aidaroos further stresses that practical application is a key aspect of the training provided by institutes, particularly in the field of digital technology. This emphasis on hands-on experience contributes to the success and expertise gained through qualification courses.

### Courses

In this context, Muqidhan, the Director of Public Relations at the Al-awn Foundation for Development, highlights the partnership with the German Corporation for International Cooperation GmbH (GIZ) in training and qualifying individuals in the field of technology and digital technology. Specifically, in Hadhramout Governorate, they targeted 460 young men and women who underwent training in a range of technical courses. Al-awn Foundation for Development looks forward to extending these programs to other governorates in the upcoming stages. These courses are of great importance as they aim to identify and nurture the talents of girls, empower them academically, and provide them with professions and skills that will help combat unemployment.

Mohammed bin Qarawan, the director of the "My Profession is in My Hands" project, further emphasizes the continuous efforts of the Selah Foundation for Development in conducting training courses in digital technology for girls over the past years. In the year 2023 alone, more than 170 girls have been trained in various fields, including maintenance, programming, design, photography, and montage, across four governorates: Hadhramout, Aden, Shabwa, and Ma'rib. The foundation aims to expand the project to attract a larger number of girls from all



### Abdullah Muqidhan

governorates of the country and empower them in this crucial field.

The Yemeni private sector has made significant contributions to empowering women and encouraging their engagement in the digital technology field, ultimately enhancing their economic status and contributing to sustainable development in the country. This has been achieved through the provision of training and vocational education opportunities, creation of digital technical jobs for stable income, and promotion of women's innovation and leadership. Despite the challenging security and economic circumstances, numerous development institutions, non-profit organizations, and institutes have made efforts to enhance women's professional and technical capabilities in the technology field, resulting in notable successes.

By continuing to support and invest in empowering women with digital technology, Yemeni girls can play a pivotal role in sustainable development, innovation, and leadership. Given the rapid technological advancements witnessed globally, it is crucial for the private sector, in collaboration with international organizations, to intensify their efforts in enhancing women's electronic capabilities and skills, thereby empowering them economically and contributing to sustainable development in Yemen.



Business

Social, Developmental, Comprehensive, Independent Newspaper, Published Monthly by: Yemen Information Center

YIC specializes in research and media that promote peace & Devlopment in Yemen

### **Our Vision**

A society that believes in the importance of women in establishing peace and raises their public awareness. Therefore, they become able to participate in all areas of building and developing the society.

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### The Technological Innovations of Yemeni Women From Childhood Passion to the Innovations of a Lifetime

"Despite the challenging circumstances and limited financial resources, the young Yemenis demonstrate remarkable ideas and mental capabilities, enabling them to innovate and produce. Engineer Farah Al-Aghbari, one of HIMO Robot inventors, highlighted the power of belief in an idea as a means to overcome obstacles and embark on new experiments. These endeavors not only contribute to the advancement of society but also inspire a spirit of innovation and progress."

### By: Haneen Al-Wahsh Women in Development and Peace

### Since Childhood

Engineer Farah Al-Aghbari, a graduate of Mechatronics Engineering, grew up in an environment surrounded by engineers, which created a passion for innovation in this field. She says, "My father is a computer engineer, and I have a lot of interests in electricity, programming, the mechanics of electrical tools, and questions about physics and motion. I have always loved everything related to space and its sciences, and I never deny that my father is my greatest supporter; he provided me with everything from books, educational supplies, and electrical tools."

With a voice full of nostalgia for the beginnings and pride in what she has achieved, she adds, "I remember that my father started teaching me programming at an early age, which encouraged me to continue my studies in a similar field after graduating from high school. I started my journey in search of a new specialization. At first, I wanted to study space engineering or astrophysics, then I chose Mechatronics because it is the most suitable specialization that combines all modern studies, such as programming, artificial intelligence, com-



puter, mechanics, and others."

### A Dream & a Mark

"As for the robot, it was not a graduation project, but rather a dream for me to make a mark in the field that I love. HIMO is a robot that resembles humans in its structure, having a head, body, and hands, and the other two (Finder), which is a drone, and (Spider), which is a mini spider robot."

Speaking about the details, Al-Agbari says, "I will focus on talking about HIMO since I designed every piece of it, printed it, assembled it, and programmed it. It is a multi-functional robot between a human robot and a mobile robot. The outer structure was designed using SolidWorks, Maya, and the entire structure was printed using a 3D printer from plastic materials (PIA 3D Filament), and it features a new idea in every mechanical part."

She continues, "The parts that move

mechanically were divided into two sections. Firstly, the bogie system used in the explorers of the NASA space agency, which makes the robot's movement smooth and capable of moving in rugged areas. Its movement is controlled by the Rotary Encoder DC motors, which are very accurate and enable the robot to move and draw coordinates for its path. As for the second path, Al-Aghbari confirms that the movement of the arm and hand is designed on main axes and certain degrees of movement, and it is possible to add degrees of movement and control the number of joints and motors in it. The design of the hand, which is made of TPU material, can adapt and grip round objects and objects that other industrial arms cannot grip. The arm can be used for several functions, the most important being the ability to grasp and place objects within its visual field, a function that relies on artificial intelligence technologies such as OpenCV, TensorFlow, and YOLO.AI."

In the same context, Al-Aghbari explains, "Regarding its controller, it is Raspberry, Arduino Uno, which enables the robot to recognize the objects in front of it and its owner, and it can determine and enter information specific to those it observes in front of it. Through voice commands, the robot can determine the sounds and words it receives in certain phrases and execute commands, whether they are movement commands or commands that require searching and answering questions in specific frameworks, such as voice recognition and Google speech-to-text."

### Future Plans

Regarding future plans, Al-Aghbari says, "I would like to start by teaching young people what I have learned and achieved, especially in the ability to use modern methods and diverse technologies that I have learned from my specialization and from several fields that I have learned remotely."

She adds, "Currently, I aspire to teach a specific group of them, the young ones, because learning programming and 3D design at a young age gives them confidence in themselves and instills a kind of passion in them."

### **Challenges and Recommendations**

In terms of challenges, Al-Aghbari emphasizes that "there are many challenges, including the lack of belief from university professors in the idea itself, as it is new and difficult for a team entirely composed of girls. Their response was that we would not be able to do it because we are just students. This ignited our enthusiasm even more. Another challenge was the lack of availability of parts, so most of what we needed had to be ordered at high prices, and the delivery took a lot of time."

She adds, "Some of the teaching and learning methods that were presented to us were not as effective, so we faced software challenges that we couldn't easily fix. Despite the many difficulties, I will never forget the positive support I received. Just as behind every great man there is a woman, behind every successful girl there is a father who worked for ir "

Speaking about recommendations, Al-Aghbari emphasizes the importance of staying informed, learning, and taking training courses, especially in a time where it is not difficult to learn new skills and gather as much information as possible that can be beneficial in various fields. This allows us to overcome the challenges we face and find logical and quick solutions to them.

She continues, "Not seeking perfection is also important. It is not necessary for the project and effort to be perfect or at their best. We just need to work, and the rest will come. We should not give up and have confidence in ourselves because a journey of a thousand miles always begins with a single step. As long as the plan is drawn and the goal is set, it is possible to achieve it through hard work."

### **Stories of Women that Excelled in the Field of Technology**

Contrary to the belief that women are confined to certain fields, it is often assumed that the realm of digital technology, particularly electronic device maintenance, is predominantly dominated by men. However, there are remarkable women who have defied societal expectations, cultural norms, and gender stereotypes associated with working in this field. These women hail from diverse regions and have successfully established their own electronic device maintenance shops, challenging the notion that such endeavors are exclusively reserved for men.

### By: Afrah Borji Women in Development and Peace

### The Beginning

Since she was young, Maryam felt a strong passion for technology and electronic devices. She would spend long hours examining and analyzing the parts of broken devices, trying to repair them and make them work like new. She had an immense internal strength that drove her to explore and face new challenges. Maryam Iqbal is a graduate in Computer Science and Engineering, and she is one of the Yemeni women working in the field of technology, being the first to open a mobile phone and electronic device maintenance shop in Al-Hudaydah city. When Maryam realized her love for this field, she decided to turn her passion into a professional career. In 2014, she obtained a diploma in mobile phone maintenance, and after training, she decided to practice this work in one of the specialized shops in the field of digital technology. However, she did not receive a warm welcome from them, as some refused to train her. This led her to make her decision and practice her passion from home. She initially started her work at home and gained the admiration of her family and relatives. They would bring their electronic devices for repair, confident that she would fix them.

Maryam says, "I got a job in a company to join the team of electronic device maintenance. At the beginning, I faced enormous challenges because I was one of the few women working in this male-dominated professional field. However, I did not retreat or lose hope."

From Hadhramaut Governorate, there is Asmaa, one of the women working in the field of technology, computer engineering, and mobile phones. Asmaa Al-Kathiri graduated with a Bachelor's degree in Business Administration.

Her wide smile and love for hard work were the secrets to her success. She never settled for anything less than the best and always sought to develop her technical skills and knowledge. Asmaa took advantage of every opportunity for training, attending conferences and workshops, until she became an expert in her field.

In addition to her technical skills, she had the ability to communicate and build strong relationships with customers. She would capture the characteristics of these customers and accurately understand their requests, which enabled her to provide practical and effective solutions to their electronic device and mobile phone problems.

### Women's Shops

In 2018, Maryam Iqbal opened her own shop for electronic device and mobile phone maintenance, with the support of her sister. She started working, and initially did not receive much attention from those around her. However, after a short period of time, she attracted the attention of many female photographers in the city of Al-Hudaydah.

Maryam says, "I faced many difficulties, such as when I go to buy spare parts for electronic devices, I noticed that they would give me the parts at a higher price compared to what they give to other shops run by men, simply because I am a woman."

Maryam expresses, "My presence in this field is due to my love for electronic engineering, computer science, and manual work. My passion for this field was also influenced by my father, who is a telecommunications engineer."

### **Women Protection**

Asmaa says, "From here, we started studying the project and establishing a shop with a female staff specializing in programming and maintenance of electronic devices, exclusively for women. The goal of the project was to protect women, preserve their privacy, and provide them with confidence and security. The project meets the needs of women for a safe place to protect their data, information, and photos stored on their phones. It gives them security and allows them to deal with female employees without embarrassment or fear of discussing the problems they have with their electronic devices."

Asmaa continues, "With the support of the institution, we opened a shop for programming and maintenance of mobile phones for women. This was well received by women, and they flocked to the shop. It made it easier for them to bring their malfunctioning phones after leaving them for a long time without getting them repaired at any other shop, out of fear for their stored data and photos."

These are success stories and sources of inspiration for many women. They serve as inspiration for a mobile phone and device maintenance engineer, proving that passion and dedication can achieve the impossible and make a difference in any chosen field of work.

"During the initial stages of my project, a startling revelation emerged: a staggering 70% of women faced difficulties in creating an email account on their mobile phones. They resorted to seeking assistance from engineers at repair shops to create email accounts on their behalf. Unfortunately, this seemingly innocent act unknowingly exposes them to the risk of blackmail incidents."



# Essential Measures to Overcome Illiteracy Among Yemeni Women in Technology

The technological field has opened up numerous opportunities for girls and women, enabling them to access financial gains and pursue work that may have been otherwise inaccessible. However, it is unfortunate that many Yemeni women face challenges such as digital illiteracy and a lack of familiarity with outdated and modern devices, like desktop computers. As a result, they find themselves lagging behind in terms of cognitive and technological advancements.

### **By: Hanan Hussein** Women in Development and Peace

### Women & Technology Globally

A study conducted by UN Women and the International Telecommunication Union (ITU) revealed that girls tend to access digital technology at a later age than boys, and their usage of technology is often restricted by their parents. UN Women emphasizes that every girl has the right to be connected, safe, and actively participate in shaping a more equal, environmentally friendly, and technology-driven future. A UN report states that women and girls use the Internet 12.5% less than men and boys. It also reveals that 46% of boys access the Internet on their phones, compared to 27% of girls.

Doreen Bogdan-Martin, Director of the ITU Telecommunication Development Bureau, stated, "Girls and young women around the world aspire to be part of the digital revolution. By removing barriers to access and ensuring safety, we can empower women and girls to make significant contributions to and benefit from ICTs. In essence, technology needs girls, and girls need technology."

ITU data shows that globally, 57% of women use the Internet compared to 62% of men. Moreover, only 30% of technology and technical science specialists are women worldwide.

Recognizing this gender disparity, Facebook launched an initiative aimed at increasing women's participation in video game development. The initiative aims to foster community relationships, highlight success stories, address the important role of women realistically, and showcase their ingenuity in the gaming industry. The goal is to support women interested in pursuing careers in this field.

Highlighting the role of civil society organizations in enhancing women's and youth involvement in technology, Dr. Sharaf Mutahar Al-Kibsi, an Assistant Professor of Business Administration at Sana'a University, presented a working paper titled "Women and Technology... Challenges and Opportunities." He emphasized that the Internet has provided greater opportunities for Yemeni women to acquire knowledge and work remotely while managing their daily routines.

Dr. Al-Kibsi also emphasized the relevance of e-commerce, suggesting it as an avenue for Yemeni women to demonstrate their expertise in information technology and e-commerce to the world. He presented several successful examples of Yemeni women who have created economic opportunities benefiting the country and their families.

The paper highlighted the crucial role that civil society organizations can play in embracing technology and e-commerce to help women and society overcome digital illiteracy and leverage the opportunities presented by e-commerce.

### **Essential Requirements**

The term "illiterate" refers to any person who has not received any education. In the modern era, the term "digital illiteracy" is used to refer to individuals who lack proficiency in dealing with the technological requirements of the age. Yemeni women excel in any field they

ر عاية اللوآء عبدالوهاب يحيى الدره وزير الصناعة والتجارة يقيم الاتحاد المام للفرف التجارية الصناعية اليمنية بالشراكة مع منظمة كلنا مبدعون التقنية التنموية مر التجارة الالكترونية الثاني في اليمن - The **2**nd E-Commerce Conference in Yemen





venture into, as evidenced by their attainment of numerous positions and important roles in society

In the midst of global development, the technological sector has emerged as a crucial domain where women strive to prove themselves, despite the daily challenges they endure. Their determination to learn, cultivate their interests, and develop their talents in this sector stems from the realization that technology is indispensable for numerous tasks. Consequently, an increasing number of Yemeni women are now engaged in digital and technological fields such as graphics, motion graphics, digital security, and others.

Sumaya Muqbel, a digital security trainer, emphasizes that early education for girls is a vital prerequisite for combatting digital illiteracy, enabling them to undergo gradual training. She emphasizes the importance of women having access to technological resources, stating that women should possess a phone or computer, have Internet access, and utilize applications for learning purposes. Such access is crucial for addressing digital illiteracy among Yemeni women.

Sumaya Moqbel asserts that education, participation in training courses and workshops, and teaching women how to use phones, computers, the Internet, and applications are pivotal in combatting digital illiteracy. She highlights women's capacity for creativity and innovation, underscoring their ability to contribute to society and foster advancement.

In the current technological era, society has become reliant on technology, and as the educators of future generations, women must be equipped with the necessary skills to teach dren how to navigate noderr

Sumaya further emphasizes that combating illiteracy among women fosters diversity and inclusivity, providing an opportunity for all segments of society to showcase their creativity and reap the benefits.

Fahmi Al-Baheth, a trainer and digital security specialist, outlines the key requirements for Yemeni women to combat digital illiteracy. He emphasizes the need to encourage women to utilize technology for educational and entrepreneurial purposes, while also providing appropriate training and qualification content. He highlights the low percentage of women currently utilizing technology, attributing it to the absence of technology-focused educational materials in schools, universities, and specialized fields.

Mazen Al-Shalali, an animation specialist,



Dr. Sharaf Mutahar Al-Kibsi

believes that the primary requirement for women in the technological sector is support from competent authorities. He acknowledges that while there may not be inherent barriers for women in any field in the twenty-first century, there exists a lack of interest from authorities in establishing and developing women in the technology field.

### **Training Courses**

Several organizations have played a significant role in supporting women in their efforts to combat digital illiteracy, one of which is the "We Are All Creative" organization. Engineer Wafa Al-Ariqi, the executive director of the organization, emphasizes the importance of women as crucial partners in development. Consequently, the organization strives to empower women in the technological sector in Yemen through a range of programs and projects. Al-Ariqi has successfully conducted numerous courses and conferences, including training sessions focused on programming, web design, cybersecurity, and the fundamentals of artificial intelligence. These initiatives aim to enhance women's technological skills and capabilities.

She confirmed that her organization ran the Technical Entrepreneurs Competition, in which technical women qualified for the final stages during the year 2020. The organization has also been instrumental in hosting various events and workshops on entrepreneurship, programming, innovation, and showcasing technical projects undertaken by women in 2021-2022

Notably, in 2020, they organized an Inter-Female Engineers in the Workplace," highlighting successful stories across diverse sectors. including private, governmental, and civil society organizations. In 2021, another event titled "Women and Technology" was organized on International Women's Day, featuring ten inspiring stories of technology projects and companies in the Yemeni market, motivating other women to launch and pursue their own ventures.

Furthermore, the organization organized an e-commerce conference in 2021, where a significant proportion of the distinguished working papers focused on women's competencies. Additionally, during 2022, they hosted Yemen's first digital transformation conference, attracting numerous women experts in the technology field, both locally and internationally.

Wafa Al-Ariqi

As part of their activities, the organization publishes the "Technology Society" magazine. Their efforts have been recognized and rewarded through the Innovative Women project at the United Nations Development Fund in 2023.

### **Barriers & Challenges**

Yemeni women encounter numerous challenges in overcoming digital illiteracy, primarily due to limited access to the Internet and essential devices such as smartphones. A significant factor contributing to this issue is the prevailing "culture of shame" among some segments of society, which restricts women's easy access to the Internet and exploration of the wider world. Furthermore, societal norms often discourage women from venturing into the online realm and hinder their ability to gain digital literacy skills.

The obstacles faced by Yemeni women also include a lack of knowledge and training on how to effectively utilize digital technology. Additionally, the scarcity of devices that enable access to and navigation of the Internet poses further challenges. Social factors such as poverty, limited resources, and illiteracy among some women further compound their difficulties in utilizing technology and conducting meaningful online searches.

Fahmi Al-Baheth, a trainer and digital security specialist, identifies societal attitudes as one of the most prominent hurdles. He notes that many societies still perceive women who engage with technology as "open-minded," which can lead to negative judgment. Moreover, there is a lack of awareness regarding viated with te ntial risks a usage, often resulting in unfavorable outcomes that further discourage women from embracing technology.

Al-Baheth advises women to acquire the necessary skills to utilize technology effectively and highlights the potential benefits. particularly in entrepreneurship and digital projects that can help combat illiteracy.

### **Recommendations & Solutions**

Engineer Wafa Al-Ariqi, through her organization, aims to address the challenges faced by women in the technology sector by implementing a range of programs and projects. These initiatives include community awareness programs, scholarship programs, and practical training programs.

In order to promote the inclusion of wo-

men in technology, Al-Kibsi emphasizes key actions that civil society organizations should undertake as outlined in the working paper: Promoting technology: Educating the public about the role and

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significance of technology, dispelling misconceptions, highlighting the various opportunities available on the Internet, and showcasing the positive applications of technology for women.

Encouraging women entrepreneurs: Recognizing and appreciating the contributions of women in the technology field through awards, certificates of appreciation, and support in competitions and honors. Additionally, sharing success stories of female

entrepreneurs who have leveraged technology in their businesses is essential. Digital lite-

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A UN report states that women and girls use the Internet 12.5% less than men and boys. It also reveals that 46% of boys access the Internet on their phones, compared to 27% of girls.

women with k n o w l e d g e about opportunities in technology, modern technologies,

marketing strategies, information security, and other relevant topics. Civil society organizations should integrate digital literacy programs into their initiatives, providing role models who demonstrate the effective use of technology in their activities. This approach helps women and young individuals overcome digital illiteracy and benefit from the experiences shared within the realm of civil society organizations.

Networking among female entrepreneurs: Facilitating community events and activities in the technology sector to create opportunities for female entrepreneurs, programmers, and engineers to connect, establish working relationships, share ideas and opportunities, and collaborate on addressing common challenges.

According to Sumaya Mokbel, there are several solutions and proposals to combat digital illiteracy among women. One of these solutions is the widespread dissemination of digital culture throughout society, conveying the message that this culture is an essential societal need across various media platforms such as newspapers, radio, television, and other modern communication channels. Mokbel emphasizes that everyone has the right to acquire knowledge and skills in using technology to stay up-to-date with the times.

Furthermore, Mokbel highlights the significance of specialized training courses as a prominent solution to address digital illiteracy among women. These courses provide women with the opportunity to learn technology and gain proficiency in accessing digital tools.

Fahmi, a researcher, also stresses the importance of encouraging women to utilize technology for their benefit, whether it be in education, entrepreneurship, or other areas. To achieve this, appropriate training and educational content must be provided to women.

Dr. Lina Al-Absi, a professor of sociology, emphasizes that financial support should be provided to enable women to acquire modern technological tools, which would facilitate their learning process. In addition to financial assistance, women should be trained and qualified to proficiently use phones and computers. Dr. Lina suggests coordinating with relevant authorities to offer free or low-cost courses and workshops aimed at spreading technological literacy among women.

Dr. Lina further proposes introducing modern digital tools into educational institutions such as schools, universities, and institutes to eradicate digital illiteracy at an early stage.

Moreover, she emphasizes the responsibility of women's workplaces to continuously educate and update employees on technological advancements. Creating specialized laboratories within institutions dedicated to teaching and training in technology can help employees, particularly women, access and stay informed about the latest developments.

In conclusion, addressing digital illiteracy is crucial, and empowering Yemeni women in digital technology can lead to the development of skills, increased opportunities, and enhanced social and economic participation.



## Anisa Al-Sallami: A Pioneer in the Field of Electronic Maintenance for Women

Years ago, a captivating headline circulated across numerous websites, hailing the remarkable achievement of Anisa Al-Sallami, a Yemeni woman who fearlessly ventured into the realm of phone and computer maintenance, ultimately establishing her own specialized store. In an industry long dominated by men, her breakthrough shattered societal norms and exemplified her exceptional competence and capability.

### By: Hanan Hussein Women in Development and Peace

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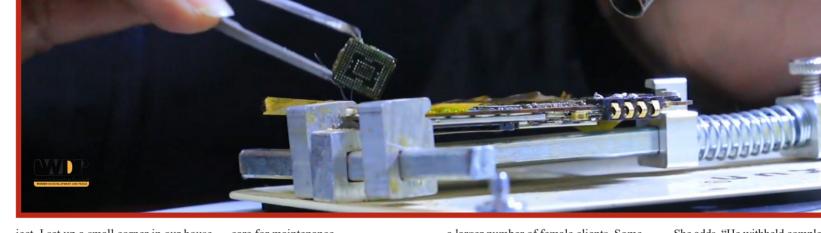
This young woman overcame the prevailing social perception that monopolized many professions exclusively for men for a long time. She successfully and innovatively entered the field as the first woman to establish her own business in this field, making it dedicated to women.

Anisa Abdul-Karim Al-Sallami, born in Taiz Governorate, is a graduate of the Computer Department at the Technical Institute there. Due to her excellence in her studies, she was appointed as a laboratory supervisor and maintenance manager at the institute. She was teaching and working at the same time, becoming an inspiration for girls at the institute with her brilliance and success. She felt her importance in her community and aspired for more.

### The Idea

Years ago, during a period of widespread stories of women being blackmailed, Anisa was prevented by her family from repairing her computer due to the spread of stories of girls being blackmailed by some engineers. These engineers would copy their personal data and photos and then threaten and blackmail them. The news reached Anisa's family, as well as other Yemeni families at the time, and these stories were the talk of the town.

Anisa thought about starting a project for phone or computer maintenance with an all-female staff, in order to safeguard the safety and privacy of girls when they needed to repair their phones or personal computers. Anisa seriously considered opening a shop specifically for women. After studying at the institute, she moved on to the next stage, which was self-development. She worked for four years from home, receiving a group of friends and clients. She set up a corner in her family's house and started her journey in the field of maintenance. She explained, "At the beginning of the pro-



ject, I set up a small corner in our house and worked on creating a mini workshop equipped with the basic tools. I used to receive my female clients there."

Anisa worked with all her effort and passion in this field. Her clientele expanded and their numbers increased, to the point where she felt the need for an official store to work in, with a larger space and more tools. She added, "The idea of opening a store outside the house came to me after my family became annoyed with the amount of work and clients inside the house."

She further added, "After that, I started looking for a store and moved to it. Currently, I work there and have a good reputation and loyal customers who trust me. Women feel secure leaving their devices for maintenance, and my work has been successful."

### The Importance of the Project

Anisa believes that the project had great importance in the eyes of many of her clients. Her goal was to protect against blackmail and preserve the privacy of women and girls' devices, as well as the confidentiality of their personal data on these devices. Additionally, it provided a sense of comfort and security when leaving their phones in her care for maintenance.

This was indeed achieved in her project, and she speaks about this aspect, saying, "Clients confidently leave their phones without fear of leaked photos or data breaches, and many trust me in this regard."

### The Difficulties

Anisa worked in the maintenance field, defying the societal view of working women and surpassing the stigma that restricts girls to a culture of shame, even if it comes at the expense of their success in society.

Despite the support of many, she faced difficulties and obstacles. She said, "We live in a very conservative society, and it is difficult for a girl to be accepted in such a field, especially after the spread of blackmail stories. Everyone was afraid, and most other maintenance shops were not operating due to the trust of female clients in my

project, which is run by female staff."

She added, "I faced many harassments from other maintenance shop owners because I gained the trust of a larger number of female clients. Some of them prevented me from buying certain tools and monopolized some parts, hoping to hinder me. But I persevered and proved the success of my project in a challenging period."

This narrow-minded view did not only affect Anisa but also extended to the girls she trained to work with her. She said, "I trained many girls to work with me, but they did not continue for more than a week. The reason was the society's view that undermined their work, so they quit for this reason."

She advises girls, saying, "Working is not a shame. If more girls entered the maintenance field, undoubtedly blackmail would decrease and cease to exist. Our presence in the maintenance field is important for the society as a whole."

Anisa recalls that the conflict in the city of Taiz was one of the obstacles

At the start of

my project, I found

that 70% of women cannot

create email accounts on their

that hindered her work. She attributes this to the intermittent road closures between Al-Hawban and other places there, which made it difficult for her to purchase some of the parts she nee-

> Suggestions to Improve Women's Work in Technology

Anisa emphasizes that girls should pursue compu-

ded.

ter-related specialties as they are in demand. She stresses the need for competent female programmers, saying, "It is crucial to have women studying and working in the technology field, such as programming."

She emphasizes the importance of self-development for girls after their studies through various means, as some men still view women as a threat to their future. She says, "When I hired a programming assistant who lacked sufficient skills, I sent her to someone for training. However, he did not provide her with enough information and would say, 'A girl will take my place in the future."" She adds, "He withheld complete information from her and kept some details to himself, fearing her future success."

In the same context, Anisa asserts that there should be specialized courses for girls in computer fields, such as programming and maintenance.

### **One Hand Cannot Clap**

In this statement, Anisa emphasizes the importance of raising social awareness among women and girls about how to minimally handle their devices and how to conduct research and access information on their phones, as well as the role of parents and relevant authorities in this regard.

She also highlights the importance of educating women in general in Yemeni society on how to deal with simple problems related to electronic devices.

She states, "At the beginning of my project, I discovered that almost 70% of women are unable to create an email account on their phones. They would go to any technician in repair shops without conducting any research, asking them to create an email account for them. Some of them, in turn, create an email account and link it to their phones, which leads to blackmail."

Anisa further states that she spreads awareness through her posts on social media platforms to help girls avoid these risks and gain knowledge and benefit from the information.

### Her Wishes

Anisa wishes to expand her business and have a larger store with more professional tools. She hopes to have a bright future with a large female workforce to meet the needs of her female customers in various maintenance and programming-related matters.

It is noteworthy that society has welcomed Anisa with enthusiasm and desire because she has achieved many goals for them, including maintaining privacy and safety in the female sector, as she lives in a society governed by strict customs and traditions.

This exceptional girl has proven through her experience that women are capable of succeeding in any field if they desire to, and through her, we see that women - if given support - are capable of shining and reaching high positions that serve society.





### Enhancing Awareness of Yemeni Women in Digital Technology Hindered by Social Customs and Traditions

Rawan Abdul-Majid is currently engaged in a persuasive effort to convince her father to purchase a modern phone for her, with the intention of utilizing it for browsing websites to enhance her English language learning. Rawan harbors aspirations of pursuing her studies in the future. Regrettably, her father is apprehensive about allowing her to venture into the realm of the internet and engage with various devices and applications. His concerns stem from the potential risks she might face, such as blackmail, hacking, or any other harm that may befall her.

### By: Yasmine Abdulhafeez Women in Development and Peace

Rawan shares, "We have been exposed to numerous detailed accounts where young girls have suffered from damaged reputations and fell victim to blackmail and exploitation. These unfortunate incidents were a direct result of their interaction with technology and their immersion in the digital world. Many girls have become victims due to their limited knowledge of handling digital technology."

She further explains, "Upon learning about these stories, my father became resolute in his decision to shield us from the internet. He envisions that even the mere use of social media applications could expose us to similar tragedies. Consequently, he adamantly refuses to fulfill our requests for devices whenever my sisters and I ask for them."

Rawan says, "Her father has lived his whole life in the countryside and was not fortunate enough to receive an education. He was raised in a family dominated by customs and traditions, and he is greatly influenced by what he hears and what people say. That's why we couldn't convince him that there are ways to protect ourselves from everything he hears."

There are several reasons behind the limited knowledge of women in Yemen in digital technology. These factors have made the presence of women in this field minimal, especially rural women and girls from uneducated families, in areas suffering from educational scarcity and high illiteracy rates. These areas are governed by customs, traditions, and societal stigma.

### **Customs & Traditions**

Asmaa Faisal is one of the girls who face customs and traditions that hinder their ability in the field of digital technology. She complains about her family's refusal to allow women to have mobile phones and use social media applications. They consider it exclusive to men and not women.

Asmaa says, "In our family, it is considered shameful for women to own modern smartphones. Only men are allowed to have them. I tried to convince my father that this is not true, but it was in vain. My mother also supports this, as well as my male siblings and most of the family members. So, it is impossible for women to have modern phones."

Asmaa adds that the prohibition of women from carrying mobile phones is part of the family's customs and traditions. The reason behind it, according to parents, is to protect women from harassment, such as being approached or having their accounts spied on, or even having their phones stolen and their data and pictures accessed.

Journalist Fatima Bawazeer says, "Customs and traditions consider women's use of technology as a disgrace, and it can lead them down an immoral path." She adds, "Some parents refuse the idea of girls using mobile phones, not to avoid the harms of using them, but out of fear that girls might use them to communicate with the opposite sex, meaning men."

### Digital Illiteracy among Yemeni Women

"It is necessary to eliminate illiteracy first in order to empower Yemeni women in the field of digital technology across the country," said experts in this field, with whom we conducted interviews about empowering women in Yemen in this aspect.

Illiteracy is one of the problems the country faces, and the ongoing conflict has exacerbated its spread among Yemenis, posing a barrier to women's empowerment in digital technology, which has become an essential requirement to keep up with the advancements of the era.

The main factors that have contributed to the high illiteracy rate among Yemeni women are ignorance, customs, and traditions that prevent women from accessing education. Reports published by Yemeni and Arab media outlets have confirmed





that the illiteracy rate among Yemeni women has exceeded 65 percent, indicating a real problem that needs to be fought and eliminated in order for women to exist in the field of digital technology and be empowered in various aspects of this field.

### Early Marriage

A lawyer and legal activist (name omitted for privacy) states, "When a woman gets married and takes on responsibilities, she often has limited opportunities to learn technology, unlike a girl who gets married at an appropriate time, where the opportunity to learn is stronger."

He adds, "Most husbands impose restrictions on their wives and do not allow them to work, complete their education, attend training courses or workshops. Furthermore, their involvement in household chores does not give them the chance to pursue technology or learn skills online."

Amna Saeed says, "I loved school more than anything else, and I was eager to write my school assignments promptly. I never missed a class, and I developed strong bonds with my teachers, and they became attached to me. I was one of the top students in my class."

Amna lives in Al Hudaydah Governorate, from a poor family. Her father works as a porter for a merchant. She has nine siblings (five males and four females). Her family is facing severe financial circumstances that forced her father to marry off his daughters at an early age, like many families in various regions of the country.

She adds, "I was forced to marry a man from our own family when I was in the fourth grade, at the age of fourteen. I gave birth to two children. My husband promised me that I could continue my education, but the responsibilities made me believe that going to school had become impossible."

And she continues, "I aspired to complete my university studies and specialize in the field of computers, but marriage prevented me from doing so. My husband told me that I had to join an institute, but I couldn't because I couldn't find someone to take care of my children while I was studying. Then, I tried to attend some training courses but couldn't. I wished I could excel in the world of digital technology and expand in all its fields, but fate didn't allow it."

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Regarding the low knowledge of women in digital technology, Muhammad Ghalib (an employee in a development institution) says, "The responsibilities that women bear, especially in rural areas, directly affect the spread of illiteracy among women in digital technology. This can be explained by the complete preoccupation of women, as they do not find enough time to develop themselves and do not realize the importance of digital technology in life."

He adds, "The absence of societal awareness of the necessity of giving women a real opportunity to develop themselves and enhance their capabilities, along with the lack of higher institutes in some areas, especially rural ones, to enable them to learn the basics of modern digital technology."

He continues, "The absence of integrated computer labs in schools, the absence of awareness programs about the importance of digital technology, and how it has become a basic necessity of the era."

He emphasizes that the deterioration of economic and living conditions has had a direct and serious impact on life in general, in addition to the absence of some civil society institutions that neglect their role in conducting courses and training programs in this field.

The conservative nature of society in some areas requires effort and awareness programs for people to realize the importance of women learning digital technology. It is necessary to unite all efforts to work towards giving women a real opportunity to enthusiastically embrace learning digital technology, through intensive government campaigns, organizations, courses, and digital awareness programs.





Yemeni women face numerous obstacles hindering their mastery of digital technology. As a result, specific requirements are necessary to address these difficulties and empower women in Yemen to navigate this world of technology, whose knowledge and skills have become indispensable in today's society.

By: Yasmine Abdulhafeez Women in Development and Peace

Munira Saeed, a 29-year-old woman from the Quban area in Shabwa Governorate, shares the common struggle of many girls in Yemen - the challenge of acquiring a laptop. Her father's inability to provide one stems from his financial constraints, as his salary as a teacher barely covers the fa-

mily's basic needs. Munira explains, "Conditions are difficult. We can only manage to sustain a modest

cing constant hardships." Munira's family settled in the Quban area after her father relocated from the countryside in Taiz Governorate to work as a teacher in a government school.

livelihood, fa-

Despite completing high school, Munira couldn't afford to enroll in private universities due to their financial circumstances. Instead, she taught in a private school for three years to support her father in meeting their household expenses. Eventually, she found job opportunities that offered a higher salary, but they required proficiency in computer usage.

Regarding her desire to learn, Munira explains, "I can access educational materials specialized in this field through the Internet. However, the lack of a laptop prevents me from utilizing these resources effectively."

She further adds, "The high prices of computers, including desktops, pose a major challenge. I contemplated finding a used one but had no luck. I reached out to family and friends in various cities, and they promised to assist me in the search. Unfortunately, I haven't received any updates yet, and I remain in a state of anticipation."

### **Challenges & Hardships**

According to Nour Khaled, a digital activist and digital security traithere are various difficulties and challenges that hinder the empowerment of Yemeni women in the field of digital technology. These obstacles include gender-based discrimination, which limits their access to education, training, and employment opportunities in this field. She emphasizes, "The ongoing conflict in our country has resulted in the destruction of infrastructure, educational institutions, and the economy, significantly impacting women's prospects in the digital technology field."

Nour Khaled suggests several solutions for Yemeni women to secure

Girls' education and empowerment are a key foundation to attain their rights in knowledge and work in the field of digital technology

their right to education and work in the technology sector. One approach is to prioritize the education of girls and

young women in digital technology, as this can enhance their skills and capabilities in this domain.

In an interview with the newspaper "Women in Development and Peace," she stresses the importance of providing training and qualification programs for women in digital technology. These programs can help them develop their professional skills, strengthen their abilities, and promote women's participation in technological entrepreneurship, ultimately leading to more job opportunities for women in this field.

Azmi Ghalib, a specialist in digital security, highlights the historical limitations on women's education, which confined them to certain fields such as education, languages, and commerce. However, in recent years, women have started venturing into technical fields that were predominantly male-dominated.

Despite this progress, Azmi points out that women's knowledge of technical concepts does not necessarily translate into a strong understanding of cybersecurity measures, leaving them vulnerable to hacking and blackmail.

Azmi further emphasizes the need for Yemeni women to focus on protecting their online accounts and personal information. While many women use platforms like Facebook, Twitter, and Instagram, they often overlook the importance of securing their accounts.

This lack of attention to security makes them more susceptible to hacking attempts. Azmi highlights the weak security practices among women, such as using easily guessed passwords and experiencing fear and apprehension while using the Internet



Ibrahim Khaled Al-Kaldi

due to the potential for blackmail.

### **Technological Empowerment Re**quirements for Women

In terms of empowering women in the field of digital technology, Ibrahim Khaled Al-Kaldi, the Director of Invention Affairs at the Hadhramout Foundation for Invention and Scientific Progress, emphasizes the importance of encouraging women and providing them with a safe and reliable environment to explore various aspects of technology. This includes utilizing the Internet for learning purposes and leveraging technology for work, as well as becoming familiar with different digital tools.

Al-Kaldi stresses that acquiring a olid education in digital techn is fundamental for women to enhance their skills in this field. It is crucial to raise awareness about job opportunities and potential challenges in digital technology, emphasizing the significance of women's participation in this domain.

Additionally, he highlights the need for a supportive environment that fosters women's learning and growth in digital technology, involving support from families, schools, and communities. This entails providing job opportunities, training programs, and promoting the establishment of wo-



men-led companies in the field. According to Al-Kaldi, empowering women in digital technology requires addressing legal and social challenges they may encounter. This involves ensuring protection of their rights and enabling them to pursue their aspirations in this field.

Digital activist Nour Khaled believes that raising societal awareness regarding the importance of empowering women in digital technology is crucial. This necessitates challenging prevailing societal norms and perceptions regarding the role of Yemeni women across various fields. She emphasizes that Yemeni women face social and cultural pressures that limit their participation, including in digital techno-

Nour suggests increasing awareness about women's contribution to development in all fields, including the digital sector, and highlighting success stories of women in digital technology. Sharing these stories can inspire other women to pursue careers in this field. Additionally, she recommends organizing seminars and advocacy campaigns through local institutions.

Nour believes that educating female students in schools and secondary schools about their rights and the global importance of the digital field can



Nour Khaled

open doors for them to pursue impactful roles such as programming. The ongoing revolution in artificial intelligence presents opportunities for women to leverage their studies and gain income in various fields.

She also emphasizes the need for greater attention to institutions that provide support for technology projects, as there is a significant shortage of female workers and leaders in this field.

In recent years, journalist activists and media outlets have reported inspiring stories of Yemeni girls from different governorates who have made breakthroughs in digital technology, particularly in mobile phone programming and other electronic devices. This signals a shift where Yemeni we are entering a field that was previously dominated by men. Their presence in this field has the potential to bring about a significant advancement in digital technology in a country where women have been confined to specific fields.

To ensure Yemeni women can fully master digital technology, it is essential to create an encouraging environment that facilitates their participation and allows them to develop their skills. This will enable them to contribute effectively to technological and economic progress in Yemen.

Azmi Ghalib



# The File 09 The File 09 Rural Women in Yemen Confront Digital Illiteracy

In her rural Yemeni hometown, 30-yearold Samia Naji embarked on a challenging quest to acquire computer skills. Despite her best efforts to raise funds for travel expenses to the nearest city where computer training was available, she faced disappointment. Deep-rooted customs and traditions prevalent in some rural areas hindered women from pursuing personal development, even when living far away from their family homes.

### **By: Yasmine Abdulhafeez** Women in Development and Peace

Samia, having completed her secondary education against all odds, encountered the limitations imposed by her family's decision, which restricted girls to primary schooling only. However, her unwavering determination to fulfill her dream of furthering her education propelled her forward, enabling her to overcome this initial obstacle

Expressing her aspirations, Samia shared, "I yearn for institutes within our village that offer computer education. I strongly feel the need to acquire computer skills, but my endeavors have been in vain. My father refuses to accompany me to the city to enroll in one of the institutes, primarily due to the absence of family connections there. Consequently, should I decide to travel, it would be challenging for him to accompany me and remain until I complete the training program."

Adding further insight, she commented, "Many of my village friends possess laptop computers, either received as gifts from relatives abroad or purchased themselves. However, they lack proficiency in utili-zing these devices. Consequently, there is a significant demand among rural women for computer courses that teach computer literacy.

### **City Access Difficulty**

Samia's situation differs from that of Asma Saif (a pseudonym) who faced financial constraints when attempting to travel to the city for computer technology education at a university or institute. The damaged roads connecting rural areas to cities, replaced by more distant and rugged routes, led to increased transportation fees due to the high prices of petroleum derivatives, their monopoly, and their sale on the black market.

Asmaa resides with her family, including her father, mother, and three sisters. Her father, working as a teacher, struggles to meet all the family's financial needs, necessitating additional employment in agriculture. This challenging financial situa-tion makes it difficult for Asmaa to travel

to the city for computer education. She explains, "I require a substantial amount of money to cover institute fees, transportation, and housing, but our current financial circumstances do not permit that. I had hoped to learn about computers and even attempted to gather funds, but it proved unsuccessful. The costs of studying are considerable, and my father is unable to afford them for me."

Asmaa further laments, "On top of struggling to learn computer skills, I don't possess a device, which has left me feeling desperate and compelled to give up. The prices of devices are exorbitant, making it impossible for me to purchase a laptop. Even if there were local places to learn about computers, it would greatly benefit us, even without owning our own devices. As for traveling to the cities for education, that option is reserved for those who can save money for such endeavors.'

Economic researcher Nabil Al-Sharabi suggests that the prevalence of digital illiteracy among rural women, more so than in urban areas, stems from various intertwined factors, with poverty being a significant contributor. He emphasizes, "Rural women rank highest among Ye-



Rashid Al-Bakali

menis in neglecting the significance of the digital world. Despite overcoming societal customs, traditions, and limited perspectives, they remain shackled by poverty and destitution, preventing them from moving away from rural areas or temporarily migrating to cities to pursue digital education and training institutes."

Al-Sharabi highlights that many rural Yemeni women complete their secondary education but are unable to continue to universities or vocational and technical institutions available in cities, leaving their dreams unfulfilled until their passing.

He emphasizes, "Although rural areas may have colleges and vocational and technical institutes, the opportunities for girls to enroll are limited due to a lack of en-

couragement and motivation. Additionally, the lack of resources for studying, practical application, and device ownership further hinders their progress."

He elaborated in his speech, "It is worth noting that the lack of encouragement and support for rural girls to engage with the digital world is not confined to the local community alone. It extends to international organizations operating in various Yemeni countryside areas. Despite proclaiming to empower rural girls and their right to access the digital world, these organizations, in their training programs, primarily focus on areas unrelated to digital skills."

He referenced, "If one were to examine the programs implemented by multiple United Nations bodies in the Yemeni countryside, it becomes evident that a significant portion of their training programs for rural girls revolve around activities such as hand sewing, hairdressing, modern livestock and poultry farming, dessert preparation, and other tasks that confine girls to a traditional realm, even though rural women may require alternative opportunities."

### Women's Involvement in Farming & **Livestock Raising**

Fatima Saeed, a 28-year-old, had a strong desire to teach her mother how to use a mobile phone and various social media applications. The purpose was to establish a convenient means of communication to check on her mother's wellbeing and health conditions. Fatima, who works in a private school in the city, faced a challenge in communicating with her mother, who resides in the countryside and

lacks phone literacy. Her mother's unfamiliarity with basic phone operations, such as answering calls or utilizing audio and video communication apps, hindered effective communication between them.

Reflecting on her mother's background, Fatima shared, "From a young age, my mother was engaged in agricultural work, raising livestock, and performing tasks like fetching water and firewood over long distances. As the eldest among her siblings, she shouldered most of the household responsibilities, which prevented her from receiving any formal education. Illiteracy in reading and writing makes it difficult for her to navigate phone usage, such as identifying callers or reading the letters on the phone buttons."

When Fatima relocated from the village to work in the city, she encountered significant difficulties in maintaining communication with her mother. This was primarily due to their house being situated in a village far from populated areas. To address this issue, during a visit to the village, Fatima decided to purchase a modern phone for her mother and personally train her on its usage. This initiative enabled them to stay in constant contact, and Fatima suc-



Rural women are part of this society, and it is their right to have an opportunity in this field, so they can become active participants in various fields

cessfully eliminated her mother's illiteracy in phone usage and various communication programs. Experts and advocates focused on women's rights acknowledge that ignorance plays a significant role in the digital illiteracy prevalent among rural women. Mahani Zain Ab-

dullah Zain Al-Saqqaf, the Deputy Director of the Agriculture

Office in Tuban District, Lahj Governorate, and Head of the Women's Development Department, explains, "Women's preoccupation with agricultural responsibilities hinders their engagement in educational pursuits, leaving them with limited understanding of technology-related matters. In many villages, especially those in mountainous regions, women lack access to education, and cultural norms deem it shameful for them to attend school. Additionally, challenging living conditions often prevent families from acquiring resources that would support girls' learning.'

### The Influence of Digital Illiteracy on Rural Women's Lives

In the given context, community activist Rashid Al-Bakali highlights the significant impact of digital illiteracy on the lives of rural women. He underscores that this impact manifests in several ways, rendering them unable to keep up with the evolving times and depriving them of remote work opportunities in areas such as social media and direct selling. Consequently, women may find themselves isolated from the world around them.

Al-Bakali further emphasizes that the effects of modern illiteracy will persist for decades, as women's lack of proficiency in digital technology leads them to waste time on unproductive activities. As the rate of digital technology adoption among rural women increases, there is a corresponding rise in the demand for learning opportunities in these fields.

Moreover, Al-Bakali asserts that rural women are an integral part of society and, therefore, deserve equal opportunities to actively engage in various domains. It is crucial to provide them with the chance to participate and thrive in the digital realm and other fields.

The responsibility of addressing technological and digital illiteracy among Yemeni women lies with the relevant government agencies. However, this task should not be shouldered by the government alone. Civil society institutions and organizations have become active partners in the development of Yemeni women, actively working to eliminate the obstacles that hinder their progress.



The Ministry

of Education plays a

pivotal role in empowering

women by providing essential

technology



# The Role of the Ministry of Education in Eradicating D Illiteracy among Yemeni Women

### By: Afrah Borji Women in Development and Peace

The Ministry of Education plays a crucial role in addressing digital illiteracy among women, highlighting its significance. By overseeing the development of the education system, the ministry equips various segments of society with essential skills, starting from early childhood education to secondary education.

In today's society, digital illiteracy is a prominent challenge, particularly for women. The rapid advancements in technology and the widespread use of the internet and social media have made digital skills indispensable for societal participation and accessing employment opportunities.

The existence of a significant gender gap in technology usage is no secret. Women often lack the necessary technological skills, which can be attributed to multiple factors, such as dedicating more time to household and family responsibilities or providing additional support to family members through extensive academic assistance.

### Adoption of Computer Science as a **School Subject**

Fathia Tha'lab, the Director of the Girls' Education Department in the Ministry of Education in Hadhramaut Coast, says, "We, in the ministry's office in the governorate, support computer science and activate it in schools and educational institutions by providing computer labs to secondary schools and educational complexes. We have also appointed a head of the technical office for e-learning and made computer science a part of the curriculum in secondary education starting from this

On her part, Amal Baqarin, the Director of the Girls' Education Department in Wadi Hadhramaut, said, "The role of the Ministry of Education is very significant in introducing modern technology into schools in a positive way, and this has already happened. Some schools went on strike, which led to the provision of platforms for lesson explanations, especially for third-grade secondary students, and their implementation in many secondary schools."

"The Ministry of Education plays a crucial role in fighting digital illiteracy through comprehensive studies," began Ahmad Aqlan, the Director of the Teachers' Union in Al-Hudaydah Governorate, discussing the ministry's role in addressing girls' illiteracy in technolo-

He added, "The ministry does this by identifying the type of technology-related needs, analyzing and interpreting them. It also seeks to understand the main reason behind girls' inability to deal with digital technology. Based on the results of these studies, the ministry organizes computer and digital technology courses, encourages girls to use computers, and enhances their knowledge and culture in this field."

Aqlan emphasized the necessity for the Ministry of Education to make computer science a core subject in the curriculum and activate it practically through workshops, seminars, and training courses in this field.

Regarding the issue of not activating computer science in government schools, Shada Shaqhan says, "In Al-Hudaydah city, in particular, there used to be computer science for female high school students, but with the absence of computer labs in schools, the activation of computer science has become very limited.'

Shaqhan affirmed, "Even if devices are available, their numbers are very few, while the number of students in one class exceeds sixty or seventy, not to mention the density of the curriculum. There is no time to add computer or technical classes. Since the beginning of the conflict, teaching computer science has been limited to private schools only. The current situation contributes to the non-activation and discontinuation of computer science in government schools due to the poor conditions and power outages."

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### **Positive Contributions**

Amal Baqirin added, "The Ministry of Education can also contribute to eliminating digital illiteracy among girls by promoting digital citizenship and improving job opportunities for workers within educational institutions by providing computer labs for this purpose."

Ahmad Aqlan said, "The Ministry of Education must prioritize digital technology to empower women, and designate computer science as a core subject within the curriculum, and provide everything necessary, such as curricula, specialists in teaching it, and organizing introductory courses and seminars, and developing a comprehensive plan and programs for implementation.'

He added, "The role of the ministry is determined in the stages of implementing these plans, in addition to providing all the necessary equipment and devices for all

girls' schools to make this subject a core subject in education."

### **Scarcity of Resources**

Muhammad Khammash, an advisor in the education sector in Sanaa, said, "The Ministry of Education has no role in providing computer labs in schools as it requires significant costs, especially in the current circumstances with the absence of budget and funding. Computers require electricity, and this service is currently unavailable, and if it does exist, it would be very costly due to the

high prices of petroleum products." Khammash added, "The role of the ministry lies in encouraging parents and students in schools, and urging girls to learn computer science, its technologies, and how to use it."

Khammash pointed out that the Ministry of Education faces many challenges that hinder the empowerment of women in the field of digital technology. One of these challenges is the shortage of qualified teachers to teach computer



"Electronic and digital education requires the collaboration of everyone and starts with encouraging families and society to support women in learning computer science." However, with the poor living conditions, Khammash questioned, "Can families afford to provide a computer for their daughters when they complete their education?"

### **Factors that Hinder Digital Illiteracy**

In this regard, Ahmad Aqlan says, "A comprehensive study of digital illiteracy should be conducted, and a database should be created to identify cases of digital illiteracy among girls and their numbers. Programs for educating and raising awareness among girls should be provided and developed, and specialized teachers should be provided, along with the necessary devices to help them address this issue.'

Aqlan added, "Curricula should be provided, and continuous monitoring should be carried out to implement these programs. The Ministry of Education can coordinate with relevant authorities and companies to provide everything schools need to teach girls, in addition to coordinating with the state to provide the required devices and qualified personnel to teach women technology.'

For her part, Baqarin emphasized the importance of raising awareness about the importance of having such devices in schools and believing in the positive psychological impact on girls through learning this technology, which will help reduce digital illiteracy in technology

The Ministry of Education has an important role in eliminating girls' illiteracy in digital technology, as it plays many important roles, including adopting computer science and encouraging female students to take digital technology training courses and many other roles that are fundamentally the reason for raising their technology level to enable them in local communities. However, the Ministry has faced challenges, which is why computer science has become inactive in many governorates of Yemen, especially in government schools.





### **Advancements and Challenges: Women's Technological Journey in Yemen**

For centuries, women have endured exclusion and marginalization across different religions and civilizations, often being considered the weaker gender. In Yemen, this remains true even today, as many women, especially those in rural areas, continue to face barriers in accessing education. Misguided social norms and negative perceptions have deep-rooted themselves in public thinking, becoming an ingrained heritage and tradition.

### By: Haneen Al-Wahsh Women in Development and Peace

However, Yemeni women have started to break free from these constraints, thanks to the technological advancements witnessed in the 20th century. This technological boom, along with the political transformations the country has undergone, has opened

up new possibilities for women. Yemen has witnessed subtle

significant yet social changes, empowering women to pursue education. reducing ilrates literacy them. among and enabling them to compete with men in various educational sectors. As a result,

women have gained access to employment opportunities and

have achieved a certain level of independence.

The beginning of the 20th century brought about a significant human transformation through technological advancements. However, the benefits of these advancements were mostly limited to men, particularly in developing societies. For women, progress was sporadic and heavily influenced by social, economic, and cultural fluctuations within their local communities.

In Yemen, the infiltration of technological products, along with a relative openness in the political system towards them, has led to the adoption of modern tools and technologies by society. However, digital literacy has varied among the population, and the phenomenon of "digital illiteracy" has emerged, with women bearing the brunt of it. Due to traditional social norms, women have often been kept at a distance from the perceived magic and cultural invasion associated with technology, resulting in their limited exposure to it.

### The Start of the Journey

Huda Farhan Saif (a citizen) remembers that time when she revealed to her family her intention to buy a mobile phone in 2009. Her older brother issued a decision to prevent her from going to school. She says, "My brother kept shouting and saying that the phone is a means of prostitution that makes it easy for men to communicate with women and reach them. He started accusing me of various things and kept monitoring me for months."

Fourteen years have passed since that incident, and she now has a modern phone that she started using in 2012. She continues to say, "Two years after the in-

Yemeni women are capable of dealing with digital technology and expanding their economic and commercial activities

cident, I was allowed to use a Nokia phone as long as it didn't have a camera. And a year later, my fiancé gave me a phone equipped with a came-

ra. Because I had a legitimate contract with him, my family reluctantly accepted the presence of the phone."

Huda summarizes many stories of Yemeni women who faced the same obstacles until technology succeeded in asserting itself as a tool for learning and communication in people's lives. Thus, the digital divide began to shrink, albeit in a very limited way among women. Ultimately, it created a safe space for women to produce, create, express opinions, and think, breaking the barriers of isolation and male monopolization of many important aspects of humanity.

In this safe space, engineer Jana Saeed found her suitable environment, and this virtual world allowed her ideas to converge and cross-pollinate with the ideas of the world, maturing and becoming more understandable and applicable as her abilities grew continuously.

Jana started her work in computer software from a small room in her family's house, using the internet to reach her clients. Gradually, her family began to accept her occupation and her seclusion in her room, as well as her communication with the outside world, before she embarked on her field journey.

Jana says, "I worked for two years as a programmer online, and when I felt that I was achieving tangible successes, I decided to make a bigger presence in the job market. My main motivation was women revealing to me their need for a woman to maintain their personal devices out of fear of exploitation."

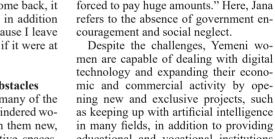
Jana confirms that many women, not a few, have reported being blackmailed by mostly teenage boys who obtained some of their private information from repair shops. Some women are forced to throw away their laptops or phones if they encounter a malfunction, as they contain their pictures, which puts them in constant fear if they take their devices to repair shops where men work.

In the middle of the city, there is a computer repair and programming shop owned by engineer Jana Saeed. Many women, including university students, visit the shop. One of them, a student in the graphics department at Taiz University, explains why she prefers the services provided by the shop over others, "The shop's services are excellent, and their prices are reasonable. You leave your device and when you come back, it performs better than before, in addition to the feeling of security because I leave my device with a woman as if it were at home."

### **Technology & Social Obstacles**

Technology has removed many of the barriers and walls that have hindered women's existence. It has given them new, more practical and informative spaces, and provided them with appropriate tools and a conducive environment to become true competitors to all other physical entities such as men and software such as robots. However, despite its safety, it is not without some challenges.

Jana Saeed summarizes some of these challenges, as she believes that society has not yet accepted the issue of women's presence in the job market, and says, 'Some male clients create conflicts out of nowhere, and when we have to respond, they say, 'We do not commu-



communicate with."

educational and vocational institutions to qualify Yemeni women to deal with digital technology. This is what Jana confirms, who is currently seeking to expand her business to serve the female element in dealing with technology, adding that she is seeking to open a technical institute for women to reduce digital illiteracy.

nicate with a woman, we want a man to

Jana Saeed complains about the go-

vernment fees that she must pay, such

as cleanliness, improvement, zakat, and

tax fees, and says, "Every time a go-

vernment collector comes to us, we are

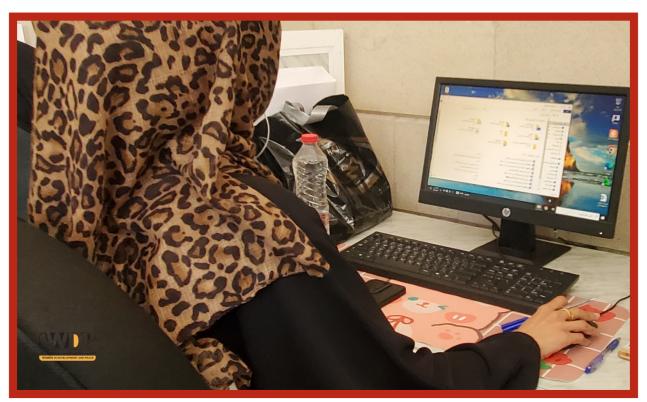
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### The Role of Organizations

With the scarcity of humanitarian interventions to develop digital performance among women, the organization "YODAT" has given greater attention to this aspect. It has developed a specialized program aimed at involving Yemeni women in digital issues, especially aspects that support the Yemeni women's direction, such as designs, privacy protection, website building, e-marketing, entrepreneurship, and advocating women's issues through social media, according to the organization.

The organization stated that the most important women's technology programs it will work on are training courses in report preparation and digital protection, which have been implemented in Aden, Mukalla, Ibb, Taiz, and Sana'a, targeting 110 women. In addition, two initiatives have been established that focus on the technical aspects for women in Sana'a and Aden, namely "Tech Girls" in Sana'a and "Techno Eve" in Aden.

The organization intends to implement more than 14 entrepreneurship courses, in which women have participated equally with men, including the "Shababik" program, which is dedicated to Yemeni girls aged 17-22 in the technical fields.







### Media's Coverage of Women's Issues in the Technology Sector: An In-depth Analysis

The aftermath of conflicts in Yemen has left a lasting impact on social and economic conditions, particularly for Yemeni women, who have faced new realities in various sectors, including technology. This shift has provided opportunities for women to harness their talents and skills, venturing into digital domains. Their endeavors have been aimed at showcasing their competence in this realm, a narrative that the media has actively sought to amplify and emphasize.

### By: Hanan Hussein Women in Development and Peace

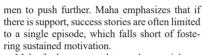
Both traditional and modern media outlets have played a pivotal role in shedding light on the issues faced by Yemeni women in the technology sector, while simultaneously fostering public awareness. These outlets have demonstrated a concerted effort to present women's concerns in a manner that resonates with their respective audiences, ensuring the most effective and appropriate communication of these issues.

### Traditional & Modern Media

Traditional media outlets, comprising television, radio, magazines, and newspapers, have played a significant role in showcasing the success stories of women in the technology field. These outlets have contributed to highlighting their experiences and sharing them with the world through dedicated programs and interviews, tailored to cater to the audience's preferences across different mediums.

On the other hand, modern media has emerged as a vital force in swiftly disseminating information, messages, and stories related to women in the technology sector. Social networking platforms, spanning various formats such as written, audio, and visual content (including podcasts, YouTube, Facebook, Instagram, and the X platform, formerly known as Twitter), have been instrumental in amplifying the media message and expanding its reach on a broader scale.

Maha Harith, a motion graphics specialist, recognizes the role of the media in presenting the achievements of successful women, while acknowledging the disparity between the audiences of modern and traditional media. She asserts that technology has proven its dominance in our current era and believes that while traditional media has a role in sharing success stories across various fields, it may not provide the high-profile support needed to inspire wo-



Maha further asserts that modern social media programs have significantly contributed to the dissemination of success stories, highlighting women's excellence and enabling them to gain international recognition. She notes that the prevalence of smartphones and active social media accounts, particularly on platforms like Facebook and the X platform, among residents in both urban and rural areas, has led to increased awareness of global developments and opportunities.

Fadi Al-Aswadi, a technical advisor, acknowledges the media's role in addressing women's issues within the technology landscape but laments that it falls short of meeting the required level of support. He expresses that initiatives aimed at supporting women in the field are few and far between, lacking regularity and consistency.

### **Movies & TV Programs**

Movies and cinemas have the potential to significantly impact the stereotypical portrayal of women in the technology sector and contribute to changing these perceptions. Through powerful storytelling, these mediums can accurately depict the real experiences of Yemeni women working in technology, shining a spotlight on their stories, contributions, and the numerous inspiring narratives that can serve as a source of motivation and empowerment for other women.

### Websites & Blogs

Websites and electronic blogs have emerged as a significant advancement in the technological realm, providing a platform for women to access comprehensive information. These platforms have become instrumental in addressing the specific challenges and advantages faced by women in their respective fields. Many individuals have established blogs to share their experiences, raise awareness, offer valuable advice, and provide guidance to women already working in or aspiring to join the technology sector.

### Women's Magazines & Publications

Newspapers and magazines have played a crucial role in showcasing the stories of Yemeni women and the specific challenges they face within the technology sector. These platforms



Fadi Al-Aswadi

have not only encouraged and empowered women but also facilitated their access to educational resources in a meaningful way.

Engineer Wafa Al-Ariqi, the franchise owner and Chairman of the Board of Directors of Technology Society Magazine, highlighted the extensive coverage by Yemeni media on women in technology. This coverage addressed various issues such as the challenges women encounter, including limited opportunities and social and cultural barriers. It also showcased the remarkable achievements of women in establishing technology companies and developing successful applications, programs, and projects.

Al-Ariqi further emphasized the role of Yemeni Technology Community Magazine, the second most visited magazine in the Arab world, in shedding light on women and technology. The magazine publishes articles and topics by female specialists in the field, introducing readers to female professionals in both private and governmental sectors. This comprehensive media coverage has raised awareness about women's issues within the technology sector and has significantly contributed to enhancing their role in driving innovation and development in Yemen.

In conclusion, the diverse media outlets have successfully brought attention to women's issues in the technology sector, recognizing their significance and garnering admiration. This media coverage has also empowered women to demand justice, equality, and freedom from job discrimination when pursuing careers in technology. As a result, women are now more actively participating in all sectors, including technology.

### Ignorance of Digital Technology Exposes Women to Online Extortion

### By: Alia Mohammed Women in Development and Peace

In the rapidly evolving world of technology, where its significance cannot be overstated, there remains a concerning gap in knowledge among numerous women in Yemen regarding digital concepts. This lack of awareness has had dire consequences for individuals like S.N.A, who found herself unsuspectingly exposed to the risks of extortion due to her limited understanding of technology.

S.N.A shares her experience, recounting, "Upon purchasing a mobile phone, I encountered the need to create an account for installing applications. Being unfamiliar with the process of setting up a Google account, I sought assistance from phone shops, where they kindly created the account on my behalf. Little did I anticipate that the person who helped me would exploit this account, gaining access to all its contents, including programs and personal photos."

### Social & Cultural Damages

A large number of women in Yemen are exposed to many technological and digital problems, which make them vulnerable to various social and cultural damages, both direct and indirect.

Wafa Taha Al-Ariqi (owner of the Technology Society Magazine) confirms that digital technology has become an essential part of our daily lives, and women's lack of knowledge in technology can cause them many social and cultural damages, the most important of which is isolation from the digital and modern technological community, affecting their opportunities for work and social interaction.

She adds, "For individuals who are not familiar with modern technology, their potential will be limited in accessing educational and professional opportunities that require the use of modern technology, in addition to limited access to vital information and services."

Al-Ariqi explained that women's lack of knowledge in modern technology makes them vulnerable to theft of their belongings and personal data by scammers and exploiters. To avoid falling into such problems, women must be aware of digital skills and the risks of cybercrime, and take necessary precautions to protect themselves.

In a related context, Abdullah Ahmed, a trainer in digital security, emphasized that women's lack of knowledge in technology significantly affects their personal lives, and their lack of knowledge makes them vulnerable to exploitation by people they often seek help from.

He added, "As we know, we are in an advanced era where many fields rely on technology, electronic communications, and social media. Women often fall into the trap of internet users, and their ignorance of such concepts reduces their chances of obtaining information, as well as job opportunities."

Abdullah pointed out the importance of encouraging women to improve their technological skills and receive continuous training to be-

### nefit from everything that is new and advanced.

### Theft & Cyber Extortion

Theft and cyber extortion are among the most threatening crimes against women. Electronic theft refers to fraudulent activities that target obtaining personal information and data. On the other hand, cyber extortion is defined

as a process of threatening individuals and institutions with the dissemination of private information and exploiting it illegally if the demanded amount is not paid.

Many women suffer financial and psychological losses due to cyber extortion and may fall victim to scams and fraud due to ignorance and lack of knowledge about securing personal accounts.

A number of hackers use fraudulent messages to steal accounts, and many girls fall into the trap of these messages without realizing that a simple click can lead to the theft of personal data and private information.

One of the girls who fell victim to cyber extortion clicked on a link that allowed her device to be hacked and her photos and personal information to be taken. Out of fear of her photos being shared on social media, the girl complied with the extortionist's demands for large sums of money. Eventually, she sought the help of a relative to apprehend the extortionist and hand him over to the police.

S.A.A says, "Myself and other girls only know that mobile phones are used for making calls and sending messages, we are unaware that there are many technological and digital aspects that can cause us a lot of problems if we are not familiar with them. This is just for something as simple as a mobile phone, so what about other modern devices that rely on advanced digital technology?"

She adds, "Electronic devices are time bombs in the hands of those who know nothing about the internet and technology. Yemeni women need to enhance their awareness of these matters and improve their skills in dealing with digital technology through courses on securing accounts, in order to enhance the protection of their personal data and prevent future risks."

Wafaa Taha Al-Ariqi says, "Ignorant Yemeni women find themselves facing theft and cyber extortion problems in different ways, depending on the type of crime and the victim's circumstances."

### **Empowering Women Technologically**

Regarding how women can confront the problems of theft and cyber extortion, Al-Ariqi emphasizes the importance of women being aware of the risks of theft and cyber extortion and taking the necessary precautions to protect their personal data, in order to avoid falling into the trap of information theft.

She said, "We can protect personal data by using strong passwords, not sharing personal information with strangers, and avoiding the use of public Wi-Fi networks."

She pointed out the important steps that women should follow in case of being subjected to cyber extortion, starting with reporting the extortion to the relevant authorities, such as the police or legal entities in the country, to seek appropriate assistance and guidance, or seeking help from a trusted person.

Wafaa Al-Ariqi added several additional tips that can help women confront the problems of theft and cyber extortion, including: not sharing personal information on social media, enhancing technical awareness, ensuring the installation of antivirus and protection software on personal electronic devices, regularly updating them, as well as setting strong configurations to ensure the confidentiality of personal information, secure different accounts, and avoiding the use of weak or easily guessable passwords.

She emphasized that women should be cautious when dealing with unknown emails and messages and avoid suspicious links and attachments.

She said, "Before opening or clicking on email links or attachments, verify the source of the email and ensure its trustworthiness, and do not open attachments or click on links from unknown sources."

She added, "Before entering personal or financial information on a website, we should verify that the website uses a secure connection (HTTPS) and check the privacy policy of the site."

The woman should be aware that there are many entities that can provide assistance to her in case of electronic theft.

She can protect herself from cybercrimes and take advantage of the opportunities offered to her in the digital space by enhancing her security awareness and digital skills.







### **Expanding Women's Opportunities in the Electronic Industry**

In an era of rapid digital transformation, electronic technology has become indispensable in every facet of our lives. Consequently, the significance of women's involvement in the electronics and e-commerce industry is gaining momentum. Women are not merely consumers of technology; they possess the potential to be trailblazing creators and innovators in this thriving domain.

### **By: Hebah Mohammed** Women in Development and Peace

### The Inception of E-Commerce

E-commerce activities began in the late 20th century, as mentioned by Dr. Mugeeb Ali Al-Saeedi (Head of the Department of Human Development and Continuous Education at Ibb University). He stated, "Some statistics indicate a continuous increase in online shoppers, especially after the CO-VID-19 pandemic, which has highlighted the importance of e-commerce and achieving economic empowerment. According to some statistics, the total global e-commerce market size is expected to reach \$6.3 trillion by the end of 2023." as mentioned by the Information Gateway.

He added, "E-commerce is simply a commercial activity conducted over the internet, where selling, buying, and managing trade operations take place online. The internet provides women with significant opportunities to establish and manage their own businesses or sell their products and services online.'

He further emphasized, "It is an ideal opportunity for women to earn income, have control over their working hours, and sell handmade products such as desserts or handcrafted clothes, as well as physical products like jewelry, cosmetics, and accessories. Additionally, they can

offer online services such as video teaching or consultations in specific fields, which helps improve their living standards for themselves and their families."

Yemeni Women & E-commerce E-commerce

is considered one of the most dynamic and interesting sectors at present. In particular, women have various opportunities to participate

in this field and achieve profes-

sional success. Expanding women's horizons in electronics not only promotes diversity and female representation but also contributes to technological advancement and innovation.

Dr. Ahlam Nasir, an expert in Islamic and social thought, says, "In the digital transformation that the world is witnessing today, several possible and accessible fields have been made available for women to work in easily and without any restrictions or conditions.

She believes that e-commerce has proviled Yemeni women with areer opportuni ties, earning money, and filling unemployment gaps. It has also made it easier for Yemeni women, who are unable to leave their homes, to work remotely in a skill that they can offer to the local market, whether it is a handmade skill that can be marketed and sold online or an electronic skill in a specific field.

She emphasizes that Yemeni women have benefited the most from e-commerce and are more suited for this type of work. They have presented creative ideas and valuable skills that are accepted in the market. Yemeni women have opened several e-commerce projects, allowing them to utilize their time, work from home, and earn money



Women have succeeded in making electronic investments in medical, food, and other fields and have achieved profits and gains

> especially in the field of e-commerce, and providing them with moral and financial support, it would help alleviate the poverty crisis and the

needs of many Yemeni families. She concludes by urging all organizations and training institutions to seize the opportunity to provide women with qualification opportunities in e-commerce and contribute to this empowerment, providing benefits to their communities under the slogan of "poverty reduction."

Dr. Ahlam

women,

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The Privacy of Women & E-commerce Journalist Amin Al-Ghabri says, "Rearding the privacy of women in our Arab societies, there are low rates compared to men in terms of women's participation in business, ownership of businesses, and commercial projects. Studies show that women's ownership of companies does not exceed 23%, and their representation in the boards of directors of companies does not exceed 5%. There are many reasons for this, most of which are related to the customs and traditions of Arab countries, the different understanding of religious regulations among many people, and reasons related to the entrenched image of women in Arab society as housewives and mothers."

He believes that there is a need to create a space for women to engage in e-commerce, which has not been achieved in traditional commerce due to reasons that do not align with the stereotypical image of Arab women and their responsibilities towards the family. With the world entering the digital age and its expansion, with many considering it the future of the global economy.

Al-Ghabri continues, "This has provided new opportunities for Yemeni and Arab women in digital commerce that aligns with the legal regulations in Arab societies and the responsibilities of women in their families. Women can manage their small and large businesses, market them. and monitor them from within their homes. E-commerce has been vital in providing new prospects for ambitious women in terms of entrepreneurship and freelancing.'

He mentioned the benefits of e-commerce, saying, "E-commerce has also become a driving factor for women's economic and social empowerment, enabling women to overcome the difficulties imposed by traditional commerce. It has allowed them to fulfill their duties in a way that is not conflicting or compromising their family responsibilities.'

He concluded, "In this context, successful female experiences have emerged in e-commerce, increasing competition between genders in digital business. The digital world has ensured good gender equality in business activity and has become an important driver for improving social and economic conditions in countries."

Dr. Mugeeb Al-Saeedi added, "Engaging in e-commerce can enhance women's innovation and creativity in designing and implementing products or services that can be sold online. Women can use their unique skills and talents to offer unique offerings, increasing demand for their products, especially since e-commerce allows them to access global markets online."

Reem Al-Haidari, a graduate of accounting, says, "With the widespread use of the internet in the world and the innovations that have touched our lives through its applications and programs, e-commerce has emerged with all its advantages and benefits. It has provided the opportunity for entrepreneurs, employers, and individuals to conduct their business transactions and promote their products locally and globally with ease and without the need to meet the customer. On the other hand, individuals can now purchase their necessities and obtain the services they desire with a click of a button, from the comfort of their homes and through their phones, without the need to leave the house to search for their needs."

Al-Haidari points out that Yemeni women have played a role in participating and benefiting from this field, opening private projects, e-stores, promoting and selling goods and services. The emergence of the digital economy has provided an opportunity for many women to enter the business field and earn a living, which remains unlikelv in the context of traditional businesses due to cultural and religious restrictions.

She emphasizes that despite all these obstacles, Yemeni women have been able to pave their way in the world of business and digital commerce. Women-led projects often use several effective methods to attract women and convince them to work, and provide services on the internet. These methods include promotion through sponsored advertisements on social media platforms

She concludes, "We need to promote success stories of distinguished female entrepreneurs that can be emulated, enter partnerships with business support institutions and other financial institutions, participate in conferences dedicated to empowering women in e-commerce, and organize trade exhibitions for women entrepreneurs.

### Available Opportunities for Women in **E**-Commerce

Technology has helped and contributed to various services that both genders, males and females, benefit from. Khalid Al-Ra'wi, a professor of communication and educational technology at Ibb University, says, "The digital realm has provided women with many opportunities for work, investment, and e-commerce in various fields, including electronic investment and e-commerce without restrictions, conditions, or commitment to fixed working hours

He continues, "Women have been able to invest electronically in medical, food, and other fields, and earn profits and gains from the comfort of their homes, without the need to leave or travel from one governorate to another, or from one country to another."

He points out that e-commerce is one of the ways that have allowed women to invest, work, earn profits, and change their lives, taking on the responsibility of supporting their families and improving their living standards.

He also notes that one of the main negative points of the digital realm and e-commerce is the potential for extortion, fraud, and scams that both genders, males and females, may fall victim to, either from each other or through fake identities. He warns everyone to be cautious and not become victims of technology and e-commerce, as they can be targeted through various social media platforms.

Regarding the available methods for women to start in e-commerce, journalist Omar Al-Basha says, "The search for knowledge and skills that women should learn in the field of digital commerce, such as technology and the internet and how to use them, and creating a website or an online store to showcase their products and services. Social media platforms can also be used, and one can benefit from social media sites for marketing."

He adds, "Targeting the interested groups in the services provided online and forums, and researching and benefiting from entities that support women's entrepreneurship, and utilizing financial support, through these steps, women can create job opportunities for themselves in the digital realm and e-commerce and participate in the world of the digital revolution.'

### **Requirements for Women in E-com**merce

E-commerce provides great opportunities for women to achieve financial independence and business success. E-commerce is an innovative and rewarding way to promote economic development and empower women socially and personally. There are essential requirements that women need to start working in e-commerce, as mentioned by Dr. Mugeeb Al-Saeedi, "Having a modern mobile device or computer, a dedicated contact number for iness purposes, internet access, joining some e-commerce platforms such as Facebook Marketplace or DHL Express, and others. Also, identifying some products and services they want to sell."

He continues, "Designing products and photographing them in an attractive way for customers, showcasing products and services on various marketing platforms such as Instagram, Facebook, and WhatsApp, based on customer needs and demand. Monitoring customer feedback on their services, continuously improving and developing their products and services, and following some videos on YouTube that demonstrate how to market their products professionally and how to generate more income online.





Resalah Mohammed Ghaleb Al-Shawkani, a resident of Al-Hijrah village in Haraz District of Sana'a Governorate was born in 1989, and has been visually impaired since the age of two, as a result of medical errors during treatment for a regular fever. Despite this adversity, she has persevered and triumphed over her disability. Resalah not only fulfilled her dream of working in a bank, where she adeptly handles all computer systems, but she also showcases her talent by presenting programs on a local radio station.

**By: Hebah Mohammed** Women in Development and Peace

### The poet says: For your life, what use are eyes that see the world If those who possess insight remain blind

She distinguished herself with her active spirit, perceptive heart, optimism, and determination to continue the journey in every moment broken by family and society, where hope is revived again, resisting all the storms of life. Resalah says, "What I have achieved today was not easy; I fought several battles, especially after entering the preparatory stage and enrolling in a school far from our home behind the mountains because the nearby schools refused to accept me due to my visual impairment. I faced many difficulties, including writing assignments with an old machine specially designed for the blind, carrying it despite its weight. I spent the night writing assignments, making sure not to fall behind any other girl in the class."

### **Resalah's Determination**

Resalah moved on to high school, challenging all difficulties as the eldest daughter of her parents. In addition to her school duties, she had household chores and the responsibility of taking care of her younger siblings. Despite her disability, she lived her life normally. The phrase that annoyed her the most since



childhood was "you can't do it".

### The University Level & Encountering Challenges

After completing high school, she faced great difficulty and rejection from the university before finally joining the media college. Resalah says, "My passion and love for media have been the goals I set for myself since childhood, to convey my message as a blind person to all disabled people that we are not helpless, even if we face difficulties. The college administration refused to accept a blind girl like me, believing that I was not qualified to handle the duties and responsibilities of the college, such as research and fieldwork, without giving us a chance to try. They even lost my file so that this girl could be registered elsewhere. We will not accept a blind person inside the media faculty."

She continues, "They believe that the blind can only join the Faculty of Arts, specializing in Quran or Islamic studies. My response to them was that the Quran and Islamic studies are obligatory for all of us, not just the blind. However, after facing severe challenges, I proved to them that there is no difference between me and the rest of the students. I showed them my complete papers in law, specializing in public relations. Many professors tried to undermine me by saying that I couldn't complete research projects, but as always, I challenged everyone. I prepared a research titled, "The Role of the Blind in Society."

Resalah indicates that presenting this research was her first appearance vith confidence while explaining and clarifying her research fully. The hall was crowded with professors, and she was able to change the negative perception of some professors towards the blind. The graduation project phase came, and the suffering continued, with increasing challenges.

Reslah does not seek sympathy from anyone. With her efforts alone, she wants to overcome the exams. She says, "Some professors did not give me the grades I deserved and judged me with a 50% average without even correcting or looking at my paper, simply because they knew I was blind.

They did so without ques-

شهادة شكر وتقدير

أكرم, بنك الرمن والكويت الأخت/ رسالة محمد غالب الشوكاني

امريد من التقدم، والازدها، وتأمل أن تستمر في تفس النهر

tioning their conscience or considering whether a blind person is capable of earning the grade they deserve or not. So, I tried to prove myself in front of them and showed that I am just like them, that I am strong and capable of anything."

I am adept at

navigating technology and

proficient in utilizing various

computer systems. Despite the

challenges, I am committed to

staying up-to-date with the

advancements

Resalah faced great difficulties during the four years, whether from her colleagues or the college professors. But that only increased her determination to continue the journey with determination, and she searched for work in several radio stations and companies to cover her university expenses. She was hired by a local radio station and presented programs specifically for people with disabilities based on her personal experience. Through this, she left a strong impact in raising awareness about the rights and laws of people with special needs.

She completed her university studies with a very good grade and she sees it as not the final destination in her life. After university, she has many dreams that she wants to achieve. Despite realizing that many blind women are deprived of their rights in all as-- family, school, and society - she has never received help or cooperation from anyone throughout her life.

### **Resalah Deals with Technology** Professionally

Resalah continued her journey to find a job that aligns with her academic specialization and faced many challenges along the way. However, she never lost hope and continued her search with strength and determination.

She says, "Thanks to God, I was able to get a job at Yemen and Kuwait Bank in the customer service department. I excel in dealing with technology and I use all computer systems with the help of a screen reader. Despite the difficulties, I try to keep up with the times.'

She continues, "I use all the systems of the bank I work for and I have mastered all the skills required by the computer. It is true that I face many difficulties during my work, but I will never be disabled. I think of other ways to solve the problems that I encounter at work and create alternative solutions to complete my tasks."

Resalah indicates that she has the ability to deal with all social media platforms with high skill. She uses the iPhone because it is better than Android as it facilitates the process of describing all the data for blind users. Apple ensures that blind individuals do not face any difficulties.

Journey of Learning Technology

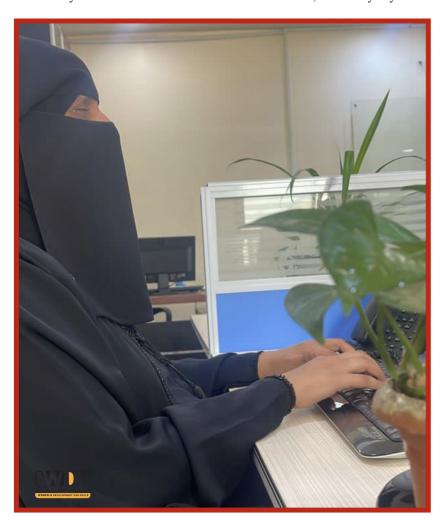
Her determination to learn technology has sparked creativity, innovation, and excellence in her. She has proven to society that she is capable contributing of and is no less than anyone else. She says, "I always used to ask myself how can I integrate into society if I cannot use a computer. The Aman Association was a great support for me and my

blind colleagues. The association provided us with computer training courses and gave us computers."

She continues, "I learned the basics and developed myself more and more. I enrolled in computer systems training courses in the Rawafed program funded by the Social Fund. I spent many hours in front of the computer, learning Windows and other systems. I also took a course in relief work and worked as a media officer at the Manarat Center for Studies and Research. I worked in these places and others to break the barrier of fear within me. I was chosen as the representative of Yemen in Women Leaders in the Arab Union for the Blind."

By choosing her as the representative of Yemen in Women Leaders in the Arab Union for the Blind, the spotlight is directed towards her abilities, talents, and contributions to society. This representation highlights the importance of empowering disabled women and encouraging them to achieve their aspirations and overcome challenges.

She is a role model for facing challenges and showing determination in the face of difficulties. Despite her visual impairment, she did not surrender to the circumstances and did not let them hinder her from achieving her dreams and aspirations. Her story inspires many, showing that disability is not a barrier to success and excellence. She encourages people with disabilities to continue their efforts and not give in to difficult circumstances. Resalah emphasizes that strong willpower and determination can achieve remarkable results, even in the presence of challenges and obstacles.





## Technological Transformation and its Impact on the Lives of Yemeni Women

Over the past few decades, the rapid development of information and communications technology has undeniably brought about significant changes in various aspects of people's lives, including those of women in Yemen. Many argue that technology has greatly enhanced the lives of Yemeni women across multiple domains, ranging from the economy to society and culture. Notably, technological progress has played a pivotal role in expanding job opportunities for Yemeni women. In this report, we aim to shed light on the profound impact that technology has had on the lives of Yemeni women.

### By: Hebah Mohammed Women in Development and Peace

### Negative Impacts of Technology on Women's Lives

In the contemporary world, technology has emerged as an indispensable component of human existence, effectively shrinking the global landscape and fostering connections among individuals regardless of borders or cultural differences. Within this framework, it is essential to examine the profound influence of technology on the lives of women in Yemen, who face unique challenges stemming from cultural norms, traditions, and the social context they navigate.

Dr. Samira Al-Shahari, a Professor of Psychotherapy at Ibb University, highlights the impact of various communication applications and programs on individuals, both positively and negatively. With the advent of technologies like Facebook, WhatsApp, Telegram, X (formely known as Twitter), Imo, Messenger, TikTok, and other visual communication tools, as well as artificial intelligence applications, audio-visual communication has become easier across different cultures and in both real and virtual worlds.

While these technologies have positive aspects such as facilitating knowledge communication, scientific development, research, creativity, innovation, and the exchange of expertise and skills, they also have negative consequences. Dr. Al-Shahari emphasizes that these technologies are a double-edged sword. She further explains that the positive aspects include advancements in medicine, education, industry, and the provision of humanitarian services. However, the negative aspects include time wastage, neglecting work, social and familial estrangement, and the pursuit of temptations and moral deviations that can arise from these applications, which are accessible to people of both genders and age groups.

Discussing the negative social and cultural effects of technology on Yemeni women, Dr. Al-Shahari points out that the misuse of technology can erode the values and moral structure of families. Mothers, in particular, may become distant from their children due to excessive preoccupation with social media. This can lead to the spread of individualistic values and selfishness, ultimately resulting in the disintegration and fragmentation of family units.

Dr. Samira Al-Shahari further points out the consequences of individuals' inclination towards satisfying their personal desires through social media. She highlights the proliferation of illicit relationships, including marital infidelity and the phenomenon of prostitution, as well as the promotion of sexual freedom by suspicious organizations and groups. Women's involvement in various communication channels such as Facebook, WhatsApp, Telegram, Instagram, and TikTok may lead them to deviate from established customs and traditions, pushing them towards excessive openness that surpasses societal

boundaries. Al-Shahari Dr. emphasizes that the incorrect and excessive use of social media weakens family and social bonds. It also exposes individuals to different cultures outside of their Yemeni environment, leading to a culture of blind imitation as women strive to fulfill

their desires since they may feel dissatisfied with their current reality.

Journalist Saddam Hassan supports Dr. Al-Shahari's views, stating that these negative effects are not limited to women alone. Both men and women may experience detrimental consequences due to the incorrect use of technology and a lack of awareness.

### Economic & Political Impacts

Dr. Samira Al-Shahari highlights the economic and political repercussions of technology on the lives of Yemeni women. She underscores that women are suscep-

Technology plays a pivotal role in transforming the lives of women, particularly when employed appropriately and within established boundaries, all while preserving the essence of Yemeni identity

*of tible to social h a r d s h i p s, including poverty, unemployment, begging, and domestic servitude for affluent households. These cir-*

cumstances make them vulnerable to moral and personal exploitation, as their knowledge and ability to communicate through available means become tools for manipulation and blackmail.

Moreover, Dr. Al-Shahari explains that one of the political consequences is the entanglement of women in the web of organizations and their allure. Regional and international associations with diverse orientations may clash with Yemeni societal values, morals, and upbringing. The economic necessity faced by Yemeni women often leads them to learn about their circumstances through social media and digital communication platforms. They become targets for political parties and mass organizations that capitalize on their vulnerable economic conditions, employing tactics such as coercion, propaganda, votebuying, enticement, intimidation, and even illegal practices like forgery.

### Digital Divide & Positive Impacts of Technology

Before delving into the impacts of technology on Yemeni women, it is important to address the prevailing digital divide in Yemen. Research studies conducted in societies akin to ours have highlighted a correlation between poverty and the digital divide. Journalist Saddam Hassan elucidates this issue, emphasizing that financial constraints have been and continue to be a hindrance for hundreds of Yemeni women in accessing the realm of technology. Additionally, factors such as ignorance, illiteracy, and societal norms and traditions have contributed to the digital gap, particularly among women.

Regarding the significant social and cultural effects of technology on Yemeni women, Saddam asserts, "Undoubtedly, technology plays a crucial role in transforming the lives of women, especially when utilized appropriately with robust regulations and principles, while preserving the Yemeni and Arab identity. Technology can foster heightened awareness among women, enabling them to acquire knowledge, information, and skills, enriching their cultural understanding, fostering self-confidence, and broadening their perspectives. In our current era of rapid artificial intelligence advancements, it is imperative to bridge the gap of digital illiteracy among women, preventing them from becoming easy targets of technology-related risks."

Furthermore, Saddam highlights the economic aspect of technology's impact, which offers women opportunities to secure employment through the internet. It contributes to enhancing their societal standing, improving the economic and living conditions of their families, and alleviating poverty and unemployment. Numerous notable examples exist of Yemeni women who have effectively utilized the internet and social platforms to achieve economic gains through lawful means. It is essential to narrow the prevalent digital divide among women by identifying its causes and addressing them, with a strong emphasis on preserving our authentic Yemeni identity and values.

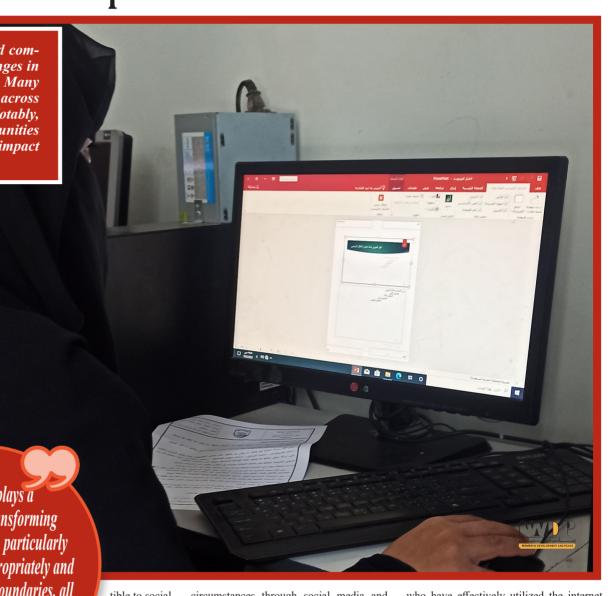
Concluding his speech, he emphasized the importance of reducing the extensive digital divide among women by identifying its causes and finding solutions, with a strong emphasis on preserving the Yemeni identity and our authentic values.

Shedding light on the impact of technology on Yemeni women during the conflict, journalist Afaf Mohammed asserts, "Undoubtedly, technology and the advancements in communication have a profound effect on the lives of Yemeni women. Bevond its negative aspects, technology has significantly influenced the lives of Yemeni women, particularly in the context of the conflict, as it has provided opportunities for many women." Those who have lost their providers have found new avenues for communication, development, and marketing of small-scale projects, some of which have experienced growth and expansion through various forms of communication and social networking.

She further elaborates, stating, "Technology serves as a gateway for communication and promoting goods and projects. Moreover, it has facilitated work processes, making them faster, and offered an opportunity for Yemeni women who have long been bound by societal customs and traditions. However, we must acknowledge a minor negative aspect, which involves the spread of rumors or the portrayal of certain women in a manner that deviates from the Yemeni identity."

Additionally, she adds, "Technology has also made knowledge and the latest information in specialized fields more accessible to women at affordable prices, thanks to the wealth of information available. It has simplified language learning and enabled communication with individuals from diverse cultures. Distance education has also become increasingly available in many universities and academic institutions."





### **16** Civil Society

## **Civil Society Organizations Continue to be Yemeni** Women's Gateway to the Digital Technology Realm

In the pursuit of empowering women in technology and fostering their awareness of its significance in life, civil society organizations hold a crucial and indispensable position. The domain of digital technology stands out as one of the most essential and influential fields in the present era. It plays a pivotal role in facilitating Yemeni women's access to employment opportunities and enabling them to attain financial independence.

### **By: Alia Mohammed** Women in Development and Peace

Numerous civil society organizations have taken the initiative to provide specialized training programs for women in the realm of digital technology. Through these endeavors, they have effectively enhanced women's skills and actively involved them in the process of development

### **Economic Empowerment**

Amal Mohammed, a digital technology trainer, firmly believes that technology serves as a highly effective means of enhancing women's participation in practical aspects of society. She recognizes it as a powerful tool that empowers women across diverse fields and enables them to seize numerous opportunities.

During her speech, she emphasized the crucial role played by civil society organizations in Yemen. Specifically, she highlighted their implementation of training projects focused on

technology and digital security. Amal added, "Thanks to the tremendous efforts of these civil society organizations, women have been provided with opportunities to access information through the Internet. Through training programs and workshops, women have been able to connect with others, exchange experiences and knowledge, thereby boosting their decision-making capabilities in various domains." Furthermore, she highlighted the economic empowerment of Yemeni women achieved through the development of electronic skills, which was made possible by several civil society organizations



**Activities & Projects** 

Numerous civil society organizations have dedicated their efforts to providing women with essential training, enabling them to utilize digital technology and attain gender equality in this field.

In Yemen, several centers and organizations have organized training courses focused on digital technology. These initiatives have not only offered crucial support to women but have also contributed to raising awareness about the significance of digital technology. Moreover, they have actively encouraged women to engage in various aspects of the digital technology industry. Prominent organizations in this endeavor include the Women's Center for Research and Training at the University of Aden and the Institute of International Education (IIE), which is a highly respected Yemeni center. The IIE has played a pivotal role in delivering training and conducting studies on women and technology, offering numerous training courses in this do main.

Furthermore, the Technology Economics Project for Economic Empowerment and Feminist Digital Security, implemented by the Hand in Hand Foundation, has targeted 15 young women from the Information Technology Department in Aden Governorate. This institution prioritizes and supports the role of girls, particularly by facilitating their entry into the labor market amidst challenging circumstances. Through this project, the trainees not only acquire skills for maintaining their own devices but also provide assistance to other women, ensuring their protection

Warda Al-Sayyed, President of the Hand in Hand Foundation for Development, expressed that the aim of the training is to empower women economically and equip them with the ability to protect themselves from electronic blackmail often encountered while servi-

**CSO**s

have provided

cing cell phones. The trainees gain knowledge about mobile phone maintenance, programming basics, electronics sector ideninspection, tifying common malfunctions in mobile phones

and screens, system downloads, as well as pro-

fessional ethics, security, and safety. She added, "At the end of the training, we provide the trainees with special work bags to help them start their own endeavors. Many of them have successfully entered the labor market, and we have benefited from the project by witnessing the establishment of their own projects and the transfer of their acquired training to their colleagues on the ground.

Nada Al-Salahi, President of the I Am Human Foundation, emphasized the importance of technological training and awareness for women, acknowledging that many are unfamiliar with digital technology concepts. Some of these concepts and topics are entirely new

to them, particularly in remote regions. Al-Salahi highlighted

the previous lack of knowledge among many women in the fields of technology and digital security. However, over time, these concepts have become increasingly fami-liar, especially for women working in data entry-re-lated roles. She

the

presence of numerous women working in specialized organizations, companies, and sectors focused on data-related subjects. Al-Salahi commended

emphasized

civil society organizations in providing trai-ning, technological seminars, and workshops. During her speech, Al-Salahi referred to

the cybersecurity and technology initiatives presented by the I Am Human Foundation. In her statement, she highlighted, "Our training sessions encompassed various aspects of personal account security, with a primary focus on preserving the security and protection of company and organization account information. Subsequently, we directed our attention towards providing comprehensive guidance on securing personal accounts and emails in a simplified manner" Furthermore, she added, "For some women,

their familiarity with technology might be limited to using mobile phones or laptops without an in-depth understanding of its underlying concepts. Nonetheless, we actively worked towards raising awareness and advocating for women who have fallen victim to blackmail. As a result, girls have gained a better understanding of how to effectively address such issues and respond in a rational manner. This newfound knowledge empowers women to safeguard their personal data on mobile phones or laptops, ensuring protection against any unauthorized access or hacking attempts.'

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### Awareness Platforms & Campaigns In recent times, there has been a prolifera-

tion of technological platforms backed by civil society organizations. These platforms have played a significant role in raising awareness about the importance of technology and digital tools, as well as their potential to create new educational and employment opportunities for women in Yemen.

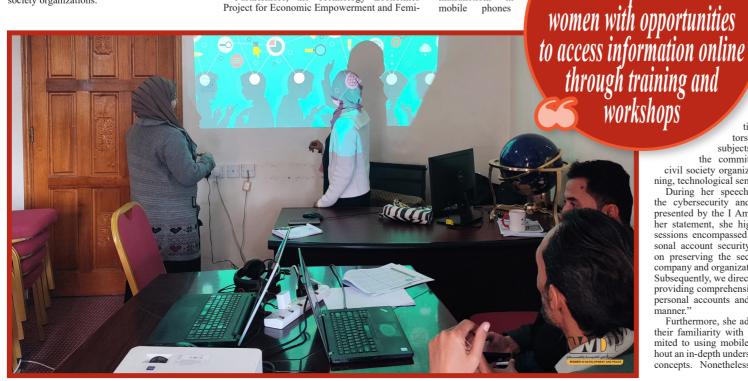
One such platform is Al-Siraj online platform, developed by Al-Kafeel Center for Infor-mation Technology. The primary objective of this platform is to streamline and enhance the educational process through the utilization of modern technology. It offers a comprehensive electronic application that enables users to access information, educational resources, and training materials via the Internet.

Highlighting noteworthy campaigns that have contributed to promoting awareness about digital technology and digital security is the "Don't Be Afraid" campaign. The campaign specifically focuses on supporting women who have fallen victim to electronic blackmail. It was executed through the collaborative efforts of the Hodaj platform and other media organizations.

Haifa Al-Odaini, the publishing officer for the "Don't Be Afraid" campaign, expressed, "The campaign garnered significant media attention, positive objectives. It successfully reached a wide audience, aiming to raise awareness among women and provide them with support in seeking justice against their blackmailers.

### Aims & Outcomes

Numerous civil society organizations in Yemen have successfully accomplished their objectives, resulting in several notable benefits that have positively impacted Yemeni women in the technological sector. These benefits include the provision of job opportunities, the attainment of financial independence, and enhanced access to health, education, and training services. Additionally, these organizations have played a vital role in improving productivity and efficiency in the workplace, fostering women's engagement in digital fields, and motivating them to enhance their skills within this domain.





# Image: and gradients Issue No (17) - 15/11/2023 Issue No (17) - 15/11/2023 Image: Civil Society Image: Civil Society</t

The involvement of Yemeni youth in advancing women's position in digital technology is crucial for social and economic development. They contribute to projects and initiatives that offer suitable opportunities and foster an encouraging environment for women's growth. In this domain, the younger generation holds the potential to play a decisive role in supporting and empowering women digitally. Women possess remarkable skills, innovative abilities, and successful experiences, making them an essential source of ideas and contributions to the labor market.

### **By: Ahmed Bajoaim** Women in Development and Peace

This report aims to highlight the endeavors undertaken by young individuals in enhancing women's position in digital technology. Despite the challenges faced by Yemeni women across various sectors, including the technical field, the significant and valuable contributions of the youth workforce are evident. Their efforts contribute to improving women's roles and elevating their positions in digital technology. Furthermore, it is anticipated that the future endeavors of the youth will continue to promote the status of Yemeni women in the rapidly advancing digital technology revolution witnessed by the world today.

### Youth Projects & Initiatives A member of the Committee for

Follow-up of cyber blackmail, Trainer Fatima Hussein, highlighted the significance of youth projects and initiatives in enhancing women's participation in digital technology. She emphasized the establishment of training and rehabilitation courses as well as scientific enabling to empower women. Additionally, the importance lies in training women in digital security, combating electronic violence, and spreading technical and digital awareness throughout society to reduce risks specifically faced by women in the local community. These projects also focus on areas that help women economically raise their position in the labor market.

Trainer Fatima Hussein further emphasized the prominent role of youth initiatives in raising women's awareness of digital technology. This includes

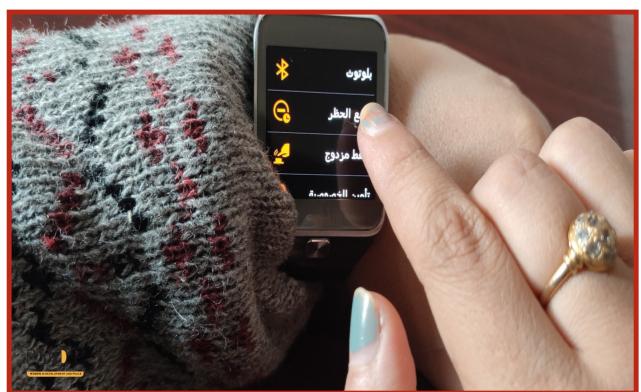


areas such as digital security, personal protection methods, dealing with online harassment, understanding device vulnerabilities to avoid blackmail, and empowering girls through training and qualification opportunities in various technical departments. These initiatives are crucial in enhancing gender equality, opening special maintenance projects for girls, maintaining their privacy, and reducing cyber blackmail.

In the context of youth projects that enhance the position of women in digital technology, Fatima Hussein shared a special statistic with the "Women in Development and Peace" newspaper. She

mentioned her involvement in a program that has targeted nearly 6,650 girls since the beginning of 2023, focusing on developing their technological capabilities and raising awareness about the risks of cyber blackmail. Additionally, Hussein has actively participated in various workshops and seminars aimed at enabling girls in this field, enhancing their presence in the labor market, reducing unemployment and the gender gap in the digital realm, and improving their material income despite challenging economic conditions.

Eng. Ahmed Al-Habashi emphasized the significant role of young people in



promoting the importance of women's participation in modern technology, particularly digital technology, to Yemeni society. He stressed that women's participation is noticeably increasing through their attendance in courses and seminars on digital technology. This is a response to the field's growing importance amidst technological development and artificial intelligence. Al-Habashi highlighted that empowering woman in the digital realm contributes to reducing the risk of blackmail, piracy, and unemployment among girls.

Al-Habashi has implemented several seminars and courses, covering subjects such as mobile protection from penetration, mobile and website design, programming languages, and other contributions by young people. These initiatives help girls develop their electronic skills, stay up to date with modern technologies, raise awareness about the misuse of social media platforms, and enable them to create projects that will have future economic benefits. Approximately 250 girls in Hadhramout Governorate have benefited from these seminars. Al-Habashi emphasized the importance of such youth initiatives, considering the limited capabilities of the concerned authorities due to the ongoing conflict.

In a related context, Sarah Al-Jabri, the Director of Programs and Projects at the "Happy Family Association" in Mukalla, highlighted the clear role of technologically experienced youth in promoting and empowering girls in digital technology. This has led to the creation of many projects for girls after their rehabilitation and acquisition of experiences. These projects instill confidence in society, especially among women, by providing a safe environment for them to reclaim electronic de-

vices and assets, protecting them from extortion, piracy, hacking, and other concerns, as well as preserving their privacy.

### **Employment of Young Women**

Trainer Fatima Hussein, a member of the Committee for Follow-up to cyber blackmail, emphasized the importance of opening projects to empower women. She highlighted the role of youth initiatives in providing opportunities for women to collaborate with relevant authorities and enter the labor market. These initiatives include projects such as women's mobile maintenance stores and a women's training and rehabilitation center. The center offers courses in digital technology, training women specialized in government facilities to enhance system security, readiness, and protection against penetration and information theft in institutions such as banks, commercial companies, police stations, prosecution, and the judicial complex.

Hussein stressed that the situation of women working in the field of digital technology requires several key points to keep up with new updates and serve both private and governmental work. These points include training and qualification, staying familiar with technological advancements, raising awareness of technology's importance, and providing more educational institutes and centers to teach and train girls.

In this context, the Happy Family Association has adopted approximately 40 girls to empower them in the labor market and enhance their professional capabilities. The association provided extensive training courses followed by accompanying courses on entrepreneurship and market feasibility to prepare the girls for success in their projects. Additionally, the association equipped the girls with integrated bags and tools to support their entry into the labor market. Ms. Sarah Al-Jabri, the project director of the association, mentioned that the association directly supervises the projects of a group of girls who have opened maintenance shops and computer repair businesses. The association provides consultations, ongoing support, and continuous follow-up for these girls. Al-Jabri explained that some members of society are hesitant about having girls work in common maintenance stores with men. To overcome this challenge, the association facilitated partnerships between the owners of maintenance shops and capable girls. Women's devices are collected by these shops and sent to the girls to fix them in their homes. This arrangement benefits the girls by providing them with a good marketing opportunity, while also gaining the confidence of women who want to avoid potential risks.

Youth initiatives play a crucial role in enhancing women's position in digital technology and empowering them in the labor market. These initiatives utilize social media and general campaigns to highlight the achievements of girls and encourage their involvement in this field. It is also important for official and private educational institutions to take effective steps in encouraging young people, especially girls, to study technology and provide appropriate educational programs that equip them with necessary skills.

In conclusion, empowering young women in the technical field is vital to provide equal job opportunities and achieve progress. It is essential to overcome social, cultural, and educational obstacles that hinder women's electronic empowerment and support their engagement in this framework. Learning in this field has become indispensable to keep up with developments in various aspects of life.





### Women and Technology Through the Lens of Yemeni Society

Women and technology play a vital role in driving development and societal change in today's world. In Yemen, empowering women in the technology sector and ensuring their access to it is a crucial step towards achieving both development and gender equality. This article seeks to capture the diverse perspectives of the Yemeni society on this matter.

### By: Hebah Mohammed Women in Development and Peace

According to Engineer Ahmed Al-Shurkasi, global technological advancements necessitate the inclusion of women in this field. He highlights that women have the capabilities to excel in various domains, citing examples of women's achievements in space sciences, technology, and electronic

industries. Al-Shurkasi asserts that as long as women possess the

determination, willpower, and suitable conditions, there are no barriers preventing them from excelling in any scientific field. Dr Abdul-

Dr. Abdullah Al-Sharani, an international trainer and human development

expert, underscores the significant importance of women's

participation in the digital and technological revolution. He emphasizes the need for women to acquire strong technological skills, as it can provide them with learning opportunities, professional growth, and economic independence. Al-Sharani believes that Yemeni women can benefit from accessing information, educational resources, and connecting with the global community across various fields.

He further explains that there is a significant illiteracy rate among women in using technology, especially in rural areas where the number of women enrolled in education is low. This leads to a digital gender gap, resulting in a disparity in accessing and utilizing technology.

He continues, "This gap can be addressed by empowering women with digital skills and ensuring equal access to technology. By bridging this gap, women can benefit from the tremendous opportunities provided by technology, such as accessing information, online education, job opportunities, and communication."

He also points out that women can use technology for remote work, allowing them to balance work and personal life and achieve financial independence. Additionally, technology can provide women with the necessary tools and resources to start and develop their own projects.

### Technology as a Source of Income

Hayat Al-Kenai, the head of the Yemeni Women's Union in Ibb, emphasizes the necessity of technology in the lives of every Yemeni woman, especially in the current circumstances in Yemen. She says, "Modern technology has made things easier for Yemeni women

Empowering Yemeni women in the field of technology promotes comprehensive and sustainable development

*ve* and opened up opportunities for them to work and provide for themselves. Today, we witness many Yemeni women achieving great suc-

cess in e-commerce projects and marketing, earning significant profits".

On the other hand, Aiman Mohammed says, "Women have benefited greatly from the presence of technology, even more than men. They have utilized it for marketing their products or activities through social media platforms, saving them effort and money. Women have received the necessary training in their field of specialization or profession, enabling them to develop themselves, acquire new skills, and make significant progress in their professional career at minimal training costs."

He continues, "Technology helps improve efficiency and increase productivity through the information it provides, the ease of marketing, and communication with others. It also facilitates continuous communication with family members abroad."

Media commentator Marwan Al-Shara'bi agrees, saying, "Women are partners with men in life to the extent of their abilities, and their presence in the technological world enhances their capabilities and culture, which are equally important. The role of women in the field of technology represents an opportunity to promote equality, provide economic opportunities, and have a positive social and cultural impact, as well as promoting diversity and creativity. In addition, women can play a vital role in directing the development of technology towards addressing social issues."

Media personality Mohammed Attif also says, "There is nothing wrong with women keeping up with technology, as long as there are regulations that preserve their dignity. Women have become significant in this field, and the world of technology has become an integral part of society as a whole, with women being a part of this society. Therefore, they have the right to keep up with the era of technology."

Mohammed believes that technology is a double-edged sword, as women determine the weapon that protects and preserves their dignity or the other weapon that destroys them. If women are destroyed, society as a whole will be destroyed.

### Women's Rights & Promoting Equality

Anwar Al-Saghir, a young Yemeni woman who manages some social media accounts for commercial companies, says, "Unfortunately, Yemeni women are still lagging behind in participating in the world of technology for reasons that may be economic or social. In Yemen, the technology industry is a strongly male-dominated field. However, by increasing women's participation and providing equal opportunities to access technological skills and opportunities, the digital divide can be reduced and gender equality can be achieved".

Anwar believes that it is extremely important for Yemeni women to be present and strong in the world of technology, and she justifies this by stating that Yemeni women are capable of giving, innovating, and creating. There are examples of women who have succeeded in managing electronic projects and have proven to everyone their right to exist in the digital revolution, and even excelled in spreading Yemeni culture and identity in most countries around the world.

Meanwhile, Hind Al-Dhaib, a computer teacher at a private school, says, "Technology can play an important role in promoting women's rights and preventing violence. Women can use digital applications and platforms to report cases of violence and assault, seek support and assistance, and access information."

Also, Hind considers women's participation in the technology sector as a powerful way to promote social awareness about Yemeni women's issues. Social media and digital platforms can be used to share their stories and raise awareness about their rights and the challenges they face. According to her, through the use of technology, Yemeni women can amplify their voices and engage in public discussions and dialogues on gender equality and other issues.

Maimuna Taher, a graphic designer, points out that women's participation in the technology sector enhances positive role models for young girls and inspires them to explore fields of technology and science. By encouraging more women to choose career paths in technology, the talent and capabilities of women in this vital sector should be expanded.

### Challenges Facing Women in the Digital Revolution

Every Yemeni woman wishes to be an active member in the world of technology, to spread the creativity that social and cultural conditions have not allowed them to express. However, there are challenges that Yemeni women face that hinder their presence in the digital revolution and their ability to benefit from it.

Haya Al-Kenai says, "Despite the inevitable necessity of Yemeni women's presence in the technology world, there are still challenges that women face in accessing and fully participating in technology. These challenges may include cultural and social restrictions that limit their ability to enter the field of technology and access the internet, especially in rural areas and impoverished communities. Additionally, there is a lack of technological infrastructure in those areas, as well as a lack of appropriate technological training and education".

She concludes, "Society must work to remove the obstacles facing women in the field of technology and promote equality in opportunities and access to technological skills and resources. There should be continuous efforts to raise awareness and train women in technology, provide inclusive and supportive work environments, and encourage more women to take on leadership positions in the technology industry".

Nada Ismail, a student in the Technology Education department, believes that the lack of awareness and the absence of proper cultural orientation in Yemen hinder women's participation in the field of technology. She emphasizes that there is still gender bias in Yemeni society, which considers technology a field exclusively for men, and women are considered unqualified for work in this field, which restricts their freedom in choosing their career paths.

She explains that Yemeni women face difficulties in accessing advanced education opportunities in the field of technology because schools, universities, and educational institutions are not readily available for girls and women, and they lack suitable curricula and educational programs for teaching technology and related sciences.

### Security Challenges

Dr. Mohammed Al-Qusayi says, "Certainly, women have the right to be partners with men in all fields, provided that they maintain their Yemeni identity, moral values, and chastity. However, in the field of technology, both men and women still struggle to obtain the necessary funding to establish and develop their technological businesses. In addition to that, the digital infrastructure in Yemen faces challenges and restrictions, which affects women's ability to access and use technology."

Dr. Israa Saad, a pharmacist, points out that there are security challenges facing women when using technology, including online harassment and cyber threats. Their personal accounts and private information may be hacked and attacked. These challenges pose obstacles to Yemeni women in fully benefiting from technology and actively participating online.

Israa calls for the cooperation of the entire society, including the government, educational institutions, technology companies, and non-governmental organizations, in providing the necessary support and creating an inclusive environment that encourages Yemeni women to actively engage in the field of technology.

It can be said that empowering Yemeni women in the field of technology enhances comprehensive and sustainable development, and promotes their presence and participation in the technology innovation sector. It contributes to achieving gender equality in access to technology and employment opportunities, and helps to address the social and economic issues facing Yemen.





### Yemeni Women in the Digital Technology Sector: Challenges and Opportunities

In our newspaper "Women in Develop-ment and Peace," we review and discuss the challenges facing Yemeni women in the digital technology sector, including digital illiteracy and social and cultural barriers.

One of the main topics we cover is "Factors Empowering Women in Digital Technology." Education and training opportunities are key factors in building women's capacities and enhancing their understanding of technology. Institutes and training courses play a vital role in this regard, as well as the development of suitable infrastructure for women to learn and apply technology. Addressing women's technological illiteracy should also involve increasing their awareness of the importance and benefits of utilizing technology in their lives

### Yemeni Women and Digital Technology: An Overview

Yemeni women face several challenges in the field of digital technology, including: Digital illiteracy: Statistics indicate that the digital illiteracy rate among Yemeni women is around 80% according to the World Bank statistics for the year 2020. Social and cultural barriers: Customs

and traditions in some Yemeni communities prevent women from learning and using technology.

Economic situation: Yemeni women encounter economic challenges, which may limit their opportunities to technological training and education.

The ignorance of women in using technology and their lack of access to it have significant implications for social and cultural aspects. The following are the main effects:

Widening the digital divide: The inability to utilize technology contributes to the growing gap between genders in the digital realm. When men possess exclusive knowledge and technical skills, women are excluded from available opportunities in the digital world, reinforcing inequality and impeding societal progress.

Restriction of Economic Opportunities: Access to technology and digital skills is vital in today's job market. Women who lack

these skills face challenges in securing employment opportunities and establishing their own businesses. Consequently, economic prospects for women are limited, resulting in increased poverty and economic discrimination

Constraints on Learning and Personal Development: Technology serves as a powerful tool for learning and personal growth. It en-ables women to expand their knowledge horizons and access information and educational resources online. When women are isolated from these opportunities, their potential for

personal and professional growth is hindered. Impact on Political and Social Participation: Technology plays a significant role in enhancing political and social engagement. When women lack digital skills and access to technology, they face difficulties fully participating in political and social activities, limiting their voice and influence in deci-sion-making processes.

### **Challenges & Opportunities**

Despite the obstacles faced, there exist numerous prospects for Yemeni women to harness the benefits of digital technology, which include

Educational opportunities: Various educational institutions in Yemen provide training courses specifically designed for women in the field of digital technology. Economic opportunities: Yemeni women

can leverage technology to initiate small businesses or engage in remote work.

Social and cultural opportunities: Technology serves as a means for Yemeni women to connect with the broader world and expand their social and cultural networks.

To address these challenges and narrow the digital gender gap, it is imperative to raise awareness and facilitate learning and training opportunities in technology for women. A key focus should be on empowering women in the technology sector, encouraging them to acquire digital skills, and providing access to available resources and opportunities. Initiatives aimed at achieving gender equality in technology must be actively promoted, ensuring the representation and active

participation of women in decision-making processes and technological innovation. By empowering women in the realm of digital technology, tangible progress can be achieved within societies and economies.

The provision of learning and training opportunities in technology for women holds immense significance. The following points underscore this importance: Promoting Gender Equality: By offering

learning and training opportunities in technology to women, gender equality is promoted within this field. When women are granted the chance to acquire knowledge and technical skills, they can compete and participate on an equal footing in the labor market, as well as in areas of innovation and entrepreneurship

Expanding Employment Opportunities: Learning technology and acquiring digital skills open up a broad spectrum of job and career prospects for women. Digital technology is an active and thriving sector in the global economy, and women equipped with the necessary skills in this domain can benefit from employment opportunities, freelance work, and the potential to establish their own projects.

Personal and Professional Development: The provision of learning and training opportunities in technology works towards advancing and augmenting women's capacities, both personally and professionally. Techno-logy can contribute to the development of critical thinking skills, innovation, and problem-solving, enabling women to achieve sustainable success in their personal and professional lives.

Economic Independence: Enhancing Learning and training in technology can significantly bolster women's economic independence. When they acquire digital skills and possess a deep understanding of technology, they can attain financial independence and the ability to manage their own income sources, granting them freedom and control over their financial lives.

Empowering Women and Fostering Excellence: The provision of learning and training opportunities in technology empowers and uplifts women in society. When women have access to technology and cultivate their skills in this domain, their self-confidence grows, enabling them to achieve remarkable feats in various fields. Technology can serve as a conduit for excellence, and when women are empowered in this realm, they can accomplish significant milestones and make effective contributions to economic and social development.

In summary, the provision of learning and training opportunities in technology for women contributes to promoting gender equality, expanding employment and personal development prospects, enhancing econo-mic independence, and empowering women while fostering their excellence within society.

### Recommendations

To enhance the empowerment of Yemeni women in the realm of digital technology, various measures can be implemented, including:

Promoting digital education for women: Both the government and private sector should prioritize the provision of digital education opportunities specifically tailored for Yemeni women.

Raising community awareness: Community awareness programs ought to be promoted to highlight the significance of digital technology for women, fostering understanding and support within the community.

Addressing social and cultural barriers: Efforts should be dedicated to dismantling social and cultural obstacles that impede the participation of Yemeni women in the field of digital technology

### **Detailed Recommendations**

The following are detailed recommendations aimed at enhancing the empowerment of Yemeni women in the realm of digital technology:

The Yemeni government should actively support the establishment of digital academies dedicated to women's education and

training throughout the country. The private sector should play a role in

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By: Eng. Wafa Taha Al-Ariqi \*

supporting training programs and employment opportunities specifically tailored for

women in digital technology. Civil society organizations should prioritize raising awareness within the community regarding the importance of digital technology for women, organizing campaigns and initiatives to promote understanding and engagement.

The media should actively showcase success stories of women thriving in the field of digital technology, highlighting their achievements and contributions.

Implementing these recommendations will contribute to unlocking the full potential of Yemeni women in the field of digital technology, leading to improvements in their own lives as well as the well-being of their communities.

### Conclusion

Digital technology plays a vital role in the lives of Yemeni women, offering them new avenues for learning, employment, and community engagement. Nevertheless, numerous challenges persist for Yemeni women in this domain, necessitating concerted action and collaboration to overcome them and attain the desired goal.

\* Executive Director of "We Are All Creative" Technology Development Organization Advisor of "Women and Technology" Issue

### Yemeni Women in the Technological Job Market: Training Opportunities and Occupational Hurdles

### **By: Ahmed Bajoaim** Women in Development and Peace

Ahed Ayman, a graduate of Hadhramout University with a bachelor's degree in Information Technology, shares her experience, saying, "Upon completing my degree with an excellent grade, I embarked on a job search in technology companies located in Mukalla. Upon learning of job openings at a particular company, I promptly applied. However, I faced rejection during the interview due to a lack of sufficient work experience. The job acceptance criteria seem to be exaggerated, disregarding my proficiency and knowledge in this field, as well as the training courses I have successfully completed, which qualify me to excel in this industry.'

Similar to Ayman, many women encounter various obstacles and difficulties that impede their progress in the job market. Yemeni girls often struggle to access training and employment opportunities within the technology field. Despite the commendable efforts made by certain institutions and international organizations to enhance women's technical and digital skills, and foster their engagement in this industry, Yemen's infrastructure in this regard remains weak. This report aims to shine a light on the primary challenges and barriers faced by women in their pursuit of employment opportunities.

### Weakness of Training Courses

Dr. Abha Ba'ouaidan, the Chairwoman of Al-Amal Cultural and Social Feminist Foundation, believes that there are numerous obstacles facing women in various sectors, including the fact that some jobs are exclusively reserved for men. On the other hand, certain roles, such as archiving, secretarial work, and positions in the healthcare, education, and digital technology sectors, have been designated

for women. However, women have not been given their rightful share of training courses within institutions or companies they work for, unlike men who are provided with training and professional courses to enhance their skills and improve the quality of their work.

Dr. Ba'ouaidan further stated in an interview with "Women in Development and Peace" newsletter that this gender discrimination is prevalent in many sectors, under the pretext that women are vulnerable to pregnancy and childbirth. Consequently, employers refuse to invest in training women and, ultimately, they end up working part-time. As a result, women lose out on opportunities for qualification, capacity development, and keeping pace with rapid technological advancements witnessed globally. All these factors pose significant obstacles for girls in the job market, and the relevant authorities in Yemen fail to understand women's rights guaranteed by international laws, such as Resolution 1325, which emphasizes women's right to leadership and empowerment in both government and private institutions.

Dr. Ba'ouaidan explained that there are many projects initiated by Yemeni women that have failed due to their lack of empowerment in technology and their limited understanding of project management, e-commerce, social media, and how to communicate effectively with their target audience. As a result, they have lost their investments. However, women continue to struggle to bridge this gap by developing themselves through training courses outside the institutions they work for, even at their own expense, or through civil society organizations concerned with women's rights.

In the same context, the president of the Justice Foundation and women's rights activist, Noha bin Suhailan, pointed out that building women's capacities in dealing with tech-

nology with awareness and proficient skills, through organizing training and qualification courses, can protect them from exploitation and vulnerabilities. Additionally, it enhances their ability to utilize these skills in finding employment opportunities and additional sources of income, thus empowering them economically. However, capacity building for girls in the technological field is weak within the institutions they work for, due to the scarcity or absence of training courses. This poses an additional barrier to acquiring the necessary skills in technology, even if the girl has access and the necessary resources.

### **Certificates of Experience**

Dr. Abha Ba'ouaidan discussed that the stereotyping of women in certain jobs and the lack of training and development opportunities hinder their ability to obtain experience certificates in the field of digital technology. This prevents them from taking leadership positions within the institutions or companies they work for. Therefore, the lack of trust in women by employers to empower them in leadership positions in institutions or government entities results in a lack of practical experience and the inability to obtain experience certificates. This prevents them from progressing in their careers and taking on more effective leadership roles within society.

Noha emphasized that experience certificates serve as a moral proof of a woman's ability to enter a specific field. However, skills empowerment is the most important factor. Nevertheless, due to the prevailing gender discrimination in most facilities in the country, we may find the opposite situation. Many individuals possess endorsements and experience certificates, but lack real skill and practical ability that aligns with technological advancements and the artificial intelligence revolution we are witnessing today. Despite this, the difficulty in obtaining experience certificates remains one of the main obstacles facing girls, preventing them from accessing better job opportunities to improve their living conditions or enhance their practical experience.

In a related context, Ahd Ayman said, "Experience certificates, or more accurately, years of experience, are nothing but additional difficulties faced by female graduates. Some organizations require years of experience for certain jobs that do not necessarily require it. It is illogical for a recent graduate in any field, not just digital technology, to obtain experience certificates or years of experience in a specific job. Experience is an important factor in performing work as required, but exaggerating its importance by employers leads many university or institute graduates to work in non-academic fields to escape unemployment or enhance their resumes with any experience."

### **Employee & Education Grants**

Ba'ouaidan mentioned that women are disadvantaged in the field of education grants, whether internal grants or external scholarships funded by the institution they work for, unlike their male counterparts who enjoy significant advantages in this regard.

Education grants in digital technology, or what is known as jobs of the era, are predominantly reserved for males rather than females. This is due to their access to educational and training grants that have enabled them to improve their skills and experiences, making them suitable for these jobs.

Noha emphasized in her statement to the "Women in Development and Peace" newsletter that many organizations find it difficult to provide grants for working girls, while it is easier to allocate the opportunity to males from a financial perspective. This is in addition to the familial and societal obstacles that some communities face, as some of them refuse to edu cate their girls through external grants. Among these obstacles are customs and traditions that restrict women and prevent them from their educational rights. They also impose conditions that are almost rejected by the donors, such as the requirement to be accompanied by a male guardian, and other difficulties that reduce girls' access to educational grants.

As for the solutions and recommendations that enhance the position of women interested in technology in the job market, Noha adds: The binding law remains the optimal solution, as it obliges organizations to distribute opportunities equally according to the law and international agreements signed by Yemen, while holding accountable those entities that exclude women. Additionally, setting a specific age when women become capable of making decisions regarding work and educational grants. Furthermore, raising awareness in society about women's rights and their contribution to the country's development, especially in modern technological advancements and the factors of artificial intelligence and the leap it has brought to the world as a whole.

Yemeni women encounter numerous social and cultural challenges that weaken gender equality and hinder the utilization of women's talents in the digital technology sector. Despite these challenges, there are also promising opportunities for girls in the digital technology field, provided that they receive encouragement and support from society, official institutions, and employers. Continuous support should be provided to girls to help them succeed and progress in this sector, while overcoming obstacles and finding sustainable solutions that enhance women's participation in digital technology. This will contribute effectively to the sustainability and comprehensive growth of Yemen.



A Monthly Newspaper Specialized in Women's Affairs Published by Yemen Information Center (YIC) Issue: 17 - Pages: 20 - Price Free - 15 / 11 / 2023



# 81.5% Believe that the Greatest Harm Caused by Yemeni Women's Lack of Digital Technology Knowledge is the Denial of Opportunities

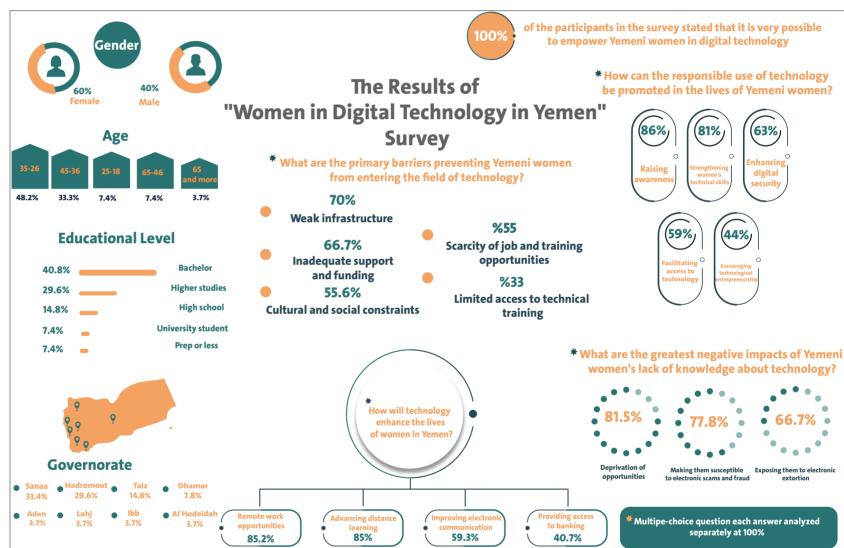
**By: Yomna Ahmed** Women in Development and Peace

Technology is a set of tools, techniques, and knowledge used to develop devices, systems, services, and software, as well as to design and produce them, all of which contribute to improving and facilitating human life. The main goal of technology is to facilitate life for people by meeting their basic needs, simplifying access to information, and providing better communication capabilities.

In Yemen, the role of technology in the daily lives of most Yemenis remains limited and confined, primarily to some urban and more developed areas. This limitation is attributed to the economic and social conditions in Yemen, such as armed conflict, poverty, and the lack of adequate infrastructure in the communication sector, among other factors.

All of this has, in one way or another, led to the spread of what is known as "digital illiteracy" among Yemeni society, causing significant harm, particularly affecting women in Yemen. Their access to modern information and technologies is more difficult due to various reasons such as Yemeni societal norms and traditions. The lack of women's knowledge of technology has significantly deprived them of many training and job opportunities, as well as limited their active and effective participation in society. It has also resulted in their not having equal and fair opportunities to access decision-making positions in Yemen. Additionally, women in Yemen are at risk of falling victim to electronic crimes, such as fraud and extortion, due to their limited knowledge of digital technology.

To obtain more comprehensive answers on how to overcome widespread electronic illiteracy among Yemeni women, the Information and Opinion Survey Unit at "Yemen Information Center" conducted a survey titled "The Presence of Digital Technology in the Lives of Women in Yemen". The survey aimed to gather opinions from a sample of Yemeni society about technology and its importance in improving the lives of Yemeni women.



It was conducted on a sample of 200 individuals, with a participation rate of 60% females and 40% males. The surveyed participants varied in age groups, with 48.2% being young adults aged between 26-35 years, 33.3% falling in the age range of 36-45 years, 7.4% belonging to the age group of 18-25 years, and an equal percentage for those between 46-65 years, while 3.7% were above 65 years old.

Regarding educational qualifications, the majority of participants had a bachelor's degree at 40.8%, followed by 29.6% having higher degrees, 14.8% holding high school certificates, and 7.4% consisting of university students and those with middle school certificates.

Geographically, the survey sample was drawn from eight governorates, with the distribution as follows: 33.4% from Sana'a, 29.6% from Hadhramout, 14.8% from Taiz, 7.4% from Dhamar, and each of Aden, Lahj, Ibb, and Al-Hodeidah representing the lowest percentage at 3.7%.

### Main Results

100% of the participants in the survey stated that it is very possible to empower Yemeni women in digital technology because it will contribute to improving their lives through various aspects, including\*: The possibility of remote and

freelance work (85.2%).

Enhancing opportunities for distance education and training (85%).

Enhancing electronic and social communication (59.3%).

Facilitating access to electronic services (40.7%).

The survey participants believe that the realization of these benefits from technology in women's lives can only be achieved if it is used in an appropriate manner. This can be achieved through the following\*: Awareness and educating them (86%). Promoting technological skills

for women (81%).

Enhancing digital security (63%). Facilitating access to technology (59.3%).

Encouraging technological entrepreneurship (44.4%).

The participants also mentioned that women's lack of knowledge about technology would cause them numerous damages. When asked about the consequences, their responses were as follows\*:

Deprivation of opportunities (81.5%).

Exposure to electronic extortion (77.8%).

Making them vulnerable to electronic fraud and scams (66.7%).

As for the challenges that hinder Yemeni women's entry into

the field of technology, the respondents' answers were as follows\*:

Weak infrastructure and challen-

ges in accessing the Internet, (70%). Lack of support and funding for Yemeni women's technological projects (66.7%).

Cultural and social restrictions (55.6%).

Lack of training and job opportunities in this field (55%).

Limited access to technological training (33.3%).

In conclusion, the participants believe that it is necessary to enhance technology in the lives of Yemeni women to ensure their access to fair and equal opportunities and to guarantee their fruitful participation in society. The participants also believe that this can only be achieved by providing a safe environment for Yemeni women to actively participate in the digital world.

\* Multiple-choice question, with each answer being analyzed as a separate sample, with a percentage of 100%.