



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

## FOOD-FOR-THOUGHT PAPER

OF 11 OCTOBER 2021

### WEBINAR SERIES

#### EMERGING OPPORTUNITIES FOR WOMEN IN THE DIGITAL AGE

On 14, 16, 21, 23, 28 and 30 September 2021, the United Nations Industrial Development Organization (UNIDO) held six thematic webinars clustered around the general theme “*Emerging opportunities for women in the digital age*”. The webinar series was organized in the run-up to the third Eurasian Women’s Forum (EAWF) to be held on 13-15 October 2021 in Saint Petersburg, Russian Federation.

In cooperation with the Federation Council of the Federal Assembly of the Russian Federation, UNIDO is organizing a panel discussion at the Forum aimed at stimulating an insightful multi-stakeholder dialogue on opportunities and bottlenecks for women’s economic empowerment, entrepreneurship and leadership in the digital age.

The webinar series served to collect selected best practices, policy recommendations and successful business cases to be then consolidated and brought to the panel discussion. The webinars covered the following topics:

**Webinar 1.** Women and modern technologies in restoring sustainability and building resilience in the aftermath of the COVID-19 crisis

**Webinar 2.** Promoting cutting-edge women-led SMEs and start-ups for a more innovative and inclusive business environment

**Webinar 3.** Empowering women globally for the attainment of SDG-9 on industry, innovation and infrastructure

**Webinar 4.** Harnessing the potential of women for advancing research, development and innovation ecosystems

**Webinar 5.** Bridging the digital skills gap: Matching growing learning opportunities for women with evolving market needs

**Webinar 6.** Women in modern creative industries: Translating innovativeness and talent into economic growth and social cohesion

More information about the completed webinars and the planned panel discussion is available [here](#).

The opinions and information contained in this document should not necessarily be considered as reflecting the views or bearing the endorsement of UNIDO.



## WEBINAR 1

### WOMEN AND MODERN TECHNOLOGIES IN RESTORING SUSTAINABILITY AND BUILDING RESILIENCE IN THE AFTERMATH OF THE COVID-19 CRISIS

#### MODERATOR



**Monica Carco**

International Development and Gender Expert  
Women20 Italy Management Team

#### SPEAKERS



**Anita Bhatia**

Deputy Executive Director for UN  
Coordination, Partnerships,  
Resources and Sustainability  
UN Women



**Cheryl Miller Van Dÿck**

Chair  
Women Entrepreneurship Platform  
(Europe)



**Emanuela Pozzan**

Senior Specialist in the Gender,  
Equality, Diversity and Inclusion  
Branch  
International Labour Organization



**Anett Numa**

Digital Transformation Adviser  
e-Estonia Briefing Centre

#### CURRENT SITUATION

- The ongoing COVID-19 crisis particularly affected women in the following three areas: income, health and security. There have been major job losses in the domains where women are disproportionately overrepresented. We have also observed the increased volume of unpaid care work and cuts in working hours. Moreover, there has been a challenge of decreased access to basic health services and a spike in violence against women.
- In 2021, the number of employed women is projected to be 30 million less than in 2019, while the number for men is projected to be the same as in 2019.
- Currently, the world is clearly divided between those who have digital access and those who do not. The ongoing crisis only widened this divide. If a family owns a computer or another device in the household, it is more likely to be used by the boy or a man, as opposed to a girl or a woman in many countries. Girls and women in families that do not have digital access to education have been particularly affected by COVID-19.
- Over 90 per cent of jobs already require digital skills and have a digital component. COVID-19 has exposed and widened the existing gap in the job market. Women are still underrepresented in the sectors of science, research and innovation, as well as in information and communication technologies (ICT).
- In 2008, the proportion of women working as ICT specialists in the European Union (EU) accounted for 22.2 per cent. The number is currently 17.4 per cent despite the demand for ICT specialists has

skyrocketed. That means that women are essentially not fully included in designing and implementing technology that is widely utilized.

- In Europe, which is the most digitalized region of the world, women are still less likely to have access to the internet. The European internet gender parity score is 0.94.
- There are many women in different parts of the world who overcome biases and study science, technology, engineering and mathematics (STEM) but are not able to translate this investment in education into earning opportunities.

### **POTENTIAL SOLUTIONS AND POLICY RECOMMENDATIONS**

- Employers and policymakers need to make particular efforts that target women and girls, including by providing focused benefits and incentives, including financial support programmes. To increase digital access, it is crucial that policymakers and employers acknowledge the existence of biases and gender stereotypes that prevent girls from entering STEM and undertake special measures to tackle them.
- It is important to encourage and support women and girls to learn life-long, upscale and rescale their skills to be successful in the new job market.
- Education is crucial to support women when they change their careers and go into sectors where they can have more financial security and opportunities to balance their work and family life. They should have the capacity to be more aware of career choices at all stages of life. Moreover, governments should ensure that when girls leave universities they are channelled to jobs in respective sectors related to their major field of study and are not compromised with low-skilled and low-paid jobs offered in the market.
- It is crucial to include more women in policy decision-making and technology design processes to ensure that those are undertaken through a gender-sensitive lens.
- All stakeholders need to implement more initiatives to help showcase successes stories and encourage experience sharing among women working in STEM. Women-to-women mentorship programmes could be useful for supporting young women starting their careers.
- There is an urgent need for a structural change to create an ecosystem that does not discriminate against women and allows the work to be redistributed between men and women.
- Cooperation between governments and the private sector needs to be strengthened, and particular objectives and targets need to be defined from a gender-sensitive perspective.
- The public sector needs to lead the transformative process, invest in expertise and facilitate matching women's skills with relevant job opportunities. Quotas for CEO-level positions could be also considered for supporting women in acquiring leadership roles. The private sector should be working with governments to inform of market trends and existing demands.

## WEBINAR 2

### PROMOTING CUTTING-EDGE WOMEN-LED SMES AND START-UPS FOR A MORE INNOVATIVE AND INCLUSIVE BUSINESS ENVIRONMENT

#### MODERATOR



**Selma Prodanovic**  
Vice-President  
European Business Angel Network

#### SPEAKERS



**Lisa-Marie Fassel**  
Co-Founder and CEO  
Female Founders



**Christine Bjärkby**  
Board Member  
European Business Angel Network



**Nikolaus Futter**  
President  
Austrian Angel Investors Association



**Yulia Badun**  
Founder  
Women2Women

#### CURRENT SITUATION

- Women still encounter many hurdles causing their continued low participation in the modern market as enterprise owners or entrepreneurs, including biases and unfavourable social conditions.
- The following seven challenges could be highlighted preventing women from starting small and medium-sized enterprises (SMEs) or start-ups: 1) limited access to finance; 2) lack of role models that results in diminishing enthusiasm and low confidence; 3) difficulties in maintaining a work-life balance; 4) limited capacities to promote themselves; 5) missing opportunities for creating strong and professional teams, as “a leader is only as good as their team”; 6) lack of innovation and development prospects, 7) need for targeted business education.
- The socio-economic impact of the COVID-19 pandemic is amplifying the existing inequalities, especially for women aspiring to become entrepreneurs. Even before the pandemic, there was a stark gap between access to capital among women entrepreneurs and their male counterparts. Figures demonstrate that women-led companies have been hit disproportionately hard compared to men-led companies. The gender financing gap remains one of the most persistent challenges. Women-led start-ups or those with at least one female founder receive a smaller proportion of the global venture capital flow.
- Most women-owned businesses are smaller in size, while accelerators are not inclusive enough to give the resources, investment and guidance for women entrepreneurs to scale up.

## POTENTIAL SOLUTIONS AND POLICY RECOMMENDATIONS

- Women entrepreneurs are wanted. The world is missing out on innovative approaches and solutions created by women. Building and running innovative SMEs and start-ups should be made more attractive to women. Women do not have an issue of competence or skills. Instead, in most cases, they experience a lack of self-confidence that can be overcome through social engagement and the demonstration of first-hand success experiences. It is crucial to spread positive discourse and lessons learned rather than focus on failures.
- More specific funding needs to be provided. Women face an issue of access to finance due to the nature of the funding ecosystem and existing biases. There is a challenge of upscaling businesses to the global level, often due to the lack of trust and experience that can be overcome through women-to-women dialogue and support. Networking and mentorship should be fostered by governments, the private sector and the global community.
- Easier access to entrepreneurial education is needed. Online educational platforms enabling 24/7 access and developed to provide girls and women with skills needed to succeed in the modern global economy have the potential to empower many of them to start businesses and expand them on an international scale. Platforms for dialogue and peer learning can provide women with tools to develop and employ their leadership skills.
- The share of women investors should be increased. The lack of diversity among investors directly influences the chances for women to receive funding. A special effort should be made to attract more women into early-stage investing.
- Structural changes in society are much needed. In order to stimulate a faster change, the approach of setting quotas for women-led start-ups and SMEs can trigger and further increase the participation of women in the economy and provide an incentive for starting their companies in cutting-edge fields.

## WEBINAR 3

### EMPOWERING WOMEN GLOBALLY FOR THE ATTAINMENT OF SDG-9 ON INDUSTRY, INNOVATION AND INFRASTRUCTURE

#### MODERATOR



**Africa Zanella**  
President  
Centre for Sustainability and Gender Economics

#### SPEAKERS



**Lizbeth Goodman**  
Chair of Creative Technology  
Innovation and Full Professor of  
Inclusive Design for Education  
University College Dublin



**Cecilia Ugaz Estrada**  
Director of the Gender Equality and  
Empowerment of Women Office  
United Nations Industrial  
Development Organization



**Mei Lin Fung**  
Co-founder  
People-Centered Internet



**Blake Burningham**  
Technical Specialist  
Microsoft

#### CURRENT SITUATION

- The current global labour force participation rate for women is approximately 49 per cent and for men 75 per cent. That shows a difference of 26 percentage points, with some regions facing a gap of more than 50 percentage points.
- Nowadays, women account for 30 per cent of employees working in the production and manufacturing sector. Globally, women's employment is mostly concentrated in low-intensity technological sectors, and they hold only 16 per cent of leadership positions. Only 4 per cent of women reach chief executive officer positions.
- There is a data collection gap and a lack of gender-disaggregated statistics in Sustainable Development Goal (SDG) 9 due to the fact that there are no gender-related targets for SDG 9.
- Girls often lack family support and encouragement to enter STEM fields and pursue their careers in the industrial sector due to the limited woman-friendly working environment.
- Digitalization is a driving force of innovation and industrial change in today's working environment due to the increased number of people working remotely. Women are key actors in the consumer decision-making process. There is a need to include women in the design of products so that they can better address the demands of the whole society. Changing the status quo and making products that satisfy the needs of

all is impossible without the promotion of diversity and making the concept of “tech for good” lasting and impactful.

- There is also research evidence that women are more inclined to collaborate and comply rather than promote themselves and publish the results of their work. This leads to the lack of role models in men-dominated fields. A number of archives with the fruits of the work of women have not been sustained. It is not rare that unconscious biases and cultural norms give more credence to men-led research and, as a result, women’s work can go unnoticed and unrecognized in many countries.

### **POTENTIAL SOLUTIONS AND POLICY RECOMMENDATIONS**

- One of the barriers for women to enter the scientific and technological fields is the lack of digital access on the ground in areas where women could be trained by experts and learn how to use digital tools. Governments should support the provision of digital training facilities in a more inclusive way to allow more women to benefit from and capitalize on the innovation landscape. They should be provided with an opportunity to undergo training remotely and be allowed to further utilize gained knowledge.
- Governments should take a lead in driving the change in the representation of women in industry, innovation and infrastructure through policy actions that will create a network of stakeholders providing professional training, mentoring and development support. It is crucial for governments to ensure an adequate balance between work and remuneration, as well as the engagement of women in the designing of such policies.
- In order to build resilient infrastructure, foster sustainable industrialization and innovation, there is a need to promote the “if you cannot measure it, it does not exist” approach. The structured system of indicators needs to be developed to measure progress and ensure the equal representation of women for the attainment of SDG 9.
- The practice of monitoring the number of public speeches delivered by women and men internationally used in non-governmental organizations could be replicated by different stakeholders to encourage more women to speak up and make their voices heard.

## WEBINAR 4

### HARNESSING THE POTENTIAL OF WOMEN FOR ADVANCING RESEARCH, DEVELOPMENT AND INNOVATION ECOSYSTEMS

#### MODERATOR



**Svetlana Malkarova**  
Vice-rector  
Plekhanov Russian University of Economics

#### SPEAKERS



**Elena Rovenskaya**  
Director of the Advancing Systems  
Analysis Programme  
International Institute for Applied  
Systems Analysis



**Marco Kamiya**  
Chief of the Innovation and  
Digitalization Division  
United Nations Industrial  
Development Organization



**Patrice Braun**  
Adjunct Professor, Research and  
Innovation  
Federation University Australia



**Myonghee Kim**  
Professor  
Sookmyung Women's University

#### CURRENT SITUATION

- Women are profoundly underrepresented in STEM. Globally, only every third person working in STEM is a woman. The gender gap in STEM is particularly high in the fastest-growing and highest-paid areas, such as computer science and engineering.
- Women also remain a minority in technical and managerial positions in technological companies. There are several reasons why women do not stay in STEM. In the USA, for example, women often quit their jobs in technological fields due to the feeling that they are undervalued, paid less and, as a result, do not make as much progress as men.
- There are many junior-level female researchers, much fewer women at the level of mid-career and very few in leadership roles. One of the key issues is an implicit bias against women. Women feel that they have to repeatedly prove themselves. Another widespread bias is that women are expected to work in more “female” fields in STEM.
- At the same time, women go through a harder time returning to work and catching up in STEM, for instance, after maternity leave due to fast technological development.
- Apart from the fact that there are much fewer studies conducted by women researchers in STEM, there is also a lack of research studies focusing on women.

## POTENTIAL SOLUTIONS AND POLICY RECOMMENDATIONS

- It is crucial to raise public awareness to encourage more girls to study and enter STEM, as well as to showcase successful role models in order to overcome the existing stereotypes.
- The policy dialogue between key stakeholders should be facilitated with the objective to produce a set of recommendations for policy actions promoting women in research, development and innovation. Governments should set up educational programmes to increase the number of women studying or working in STEM, for example, through providing grants and scholarships.
- Universities can establish partnerships with private companies to also obtain grants for women in STEM. Moreover, the self-organization of clubs at the level of universities could be encouraged to foster open discussions about women in the field.
- Research programmes should be established to address the issues of gender imbalance. Special research funds could be provided to support research teams containing female researchers, as well as research projects targeting the subjects related to women or beneficial to women. It is necessary to conduct research on female role models in STEM across the countries and promote their success stories globally.
- The development of supportive and nurturing ecosystems for women in STEM is needed. Opportunities for networking with other women and mentoring younger or less experienced women can have an empowering effect. Moreover, the provision of family-friendly support systems, for example, high-quality childcare centres and parental leave is a requirement for sustaining the women workforce and enhancing their productivity.
- It is also important to strengthen the capacities of national women business associations in providing better-quality and demand-driven services to women entrepreneurs helping them create and scale up businesses.
- The global community could help promote women-led investment through the facilitation of business partnerships and access to finance. Promoting international cooperation can effectively enhance gender inclusivity in STEM.

## WEBINAR 5

### BRIDGING THE DIGITAL SKILLS GAP: MATCHING GROWING LEARNING OPPORTUNITIES FOR WOMEN WITH EVOLVING MARKET NEEDS

#### MODERATOR



**Natalia Mochu**

Regional Director of the Regional Office for CIS  
International Telecommunication Union

#### SPEAKERS



**Nadezhda Surova**

Director of the Competence Center  
“Personnel for the Digital Economy”  
National Technology Initiative



**Jacek Cukrowski**

Chief of the Regional Coordination  
Division for Europe and Central Asia  
United Nations Industrial  
Development Organization



**Maja Tomanič-Vidovič**

Director  
Slovene Enterprise Fund



**Oxana Kukharchuk**

Board Member  
Element

#### CURRENT SITUATION

- As a result of the COVID-19 pandemic, a quarter of self-employed women have lost their jobs compared to a fifth of men. Women’s employment is currently 19 per cent more at risk than that of men. This is primarily attributed to the fact that women are overrepresented in low-paid, low-skilled jobs that are often the first ones to be cut in affected businesses.
- The pandemic has shown that digitalization helps businesses sustain themselves through networks and connectivity, data, artificial intelligence, as well as basic and advanced digital skills.
- There is evidence that when women and girls are empowered through digital technologies, their families, communities and national economies benefit as well. Bringing additional 600 million women and girls online could boost global GDP by USD 18 billion. It would also allow unlocking the potential of women to access international markets and enjoy equal economic opportunities.
- The proportion of women involved in entrepreneurship in artificial intelligence, cloud computing, blockchain and the internet of things is significantly lower than the proportion of men running businesses in the areas relevant to Industry 4.0.

- The majority of women entrepreneurs currently focus their businesses on marketing, advertisement, beauty, fashion and education – the fields that require digital skills the least and do not necessarily use the full potential offered by e-commerce.

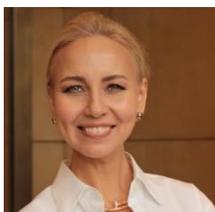
### **POTENTIAL SOLUTIONS AND POLICY RECOMMENDATIONS**

- Governments should take a lead in setting legal and regulatory frameworks to encourage comprehensive and systematic cooperation and develop synergies among all institutions to bridge the existing digital skills gap. Clear guidelines and a strategy of action should be provided.
- To bridge the gap, special support programmes can be introduced with the key objective to encourage inclusive digitalization, including by preparing a digital strategy, promoting digital marketing and developing digital competencies. Through such a programme, for example, enterprises can be offered targeted expert assistance to digitalize their processes and have costs of these services reimbursed by the government.
- National programmes for girls could be implemented focusing on digital education in schools, start-up support, adjusted government administration and advanced infrastructure. Support initiatives uniting business and expert communities are needed to develop the technological market and create new university curricula and platforms to help women acquire new skills and study technology, including blockchain, artificial intelligence and data science.
- To attract more women into the STEM field, it is important to further popularize STEM at schools, showcase success stories and help overcome biases, as about 70 per cent of women cite the need for mentorship.
- Governments can support women by providing direct COVID-19 loans without interest rates and introducing favourable insurance policies with simplified procedures. To assist with the digital transformation of business, special funds or grants can be created focused on investments in digital technology in the supply and sales chains.
- Promoting women’s leadership will help achieve gender equality in the workplace. It is not always the “glass ceiling” keeping women from growing, but a “sticky floor” consisting of doubts, fears and uncertainties. Those can be overcome only if more success stories are shared publicly.
- To start a business in the modern economy it is important to 1) understand the concept of selling online and how to scale up; 2) prepare a 3-5-year strategic plan with a clearly defined niche, product’s marginality and markets to enter; 3) develop a corporate culture to overcome fears of new things; 4) constantly increase efficiency, including through automation and big data integration.
- International organizations should continue to support global partnerships aimed at bridging the digital gender gap, raise awareness, promote global best practises and showcase success stories, as well as implement in partnership with national stakeholders (governments, the private sector, academia, etc.) special programmes related to the development of digital competencies among girls and women.

## WEBINAR 6

### WOMEN IN MODERN CREATIVE INDUSTRIES: TRANSLATING INNOVATIVENESS AND TALENT INTO ECONOMIC GROWTH AND SOCIAL COHESION

#### MODERATOR

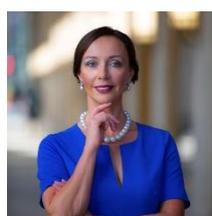


**Yanina Novitskaya,**  
Managing Director  
Cartier Russia and CIS

#### SPEAKERS



**Veronika Peshkova**  
Goodwill Ambassador  
United Nations Industrial  
Development Organization



**Aleksandra Efimova**  
CEO  
RP Group International



**Elena Myakotnikova**  
Representative of Russia  
Women20



**Farrukh Alimdjanov**  
Industrial Development Officer  
United Nations Industrial  
Development Organization

#### CURRENT SITUATION

- Creative industries account for 3 per cent of the world's GDP, and there is space for further expansion. The role of creative industries has been growing due to the increased design and branding share in product value added. It currently accounts for approximately 80 per cent. Nowadays, creative industries are tightly integrated with the market not only in Europe and in North America, but also worldwide, as creative industries have become the driver of the modern economy helping solve macroeconomic challenges.
- The sector of creative industries has the advantage of relatively low entry barriers, allowing a large number of women to start their projects in the creative field. Moreover, creative industries are traditionally female-friendly.
- Many creative industries are characterized by flexible employment policies and an opportunity to work remotely, which is of particular relevance for women.
- Most of the products in creative industries are distributed through digital channels, allowing the market to scale up quickly.
- The COVID-19 pandemic brought not only challenges but also new opportunities, allowing women to develop careers in creative industries, start and successfully run businesses from home.

- Creative industries are a powerful driver of industrial development for smaller countries, which need to revitalize their economies and preserve their cultural heritage by digitizing and scaling up to reach new markets. Creative industries are at the basis of sustainable competitiveness for countries that cannot necessarily benefit in terms of the cost of production and thus can increase the intellectual share of value added.
- Creativity is enhanced by diversity, therefore, gender equality is paramount to unleash the full potential of the industry.

### **POTENTIAL SOLUTIONS AND POLICY RECOMMENDATIONS**

- There is a need to develop trust among governments, the private sector, investors and the international community in the success of start-ups in the creative economy. Trust is an important element of the effective and fast launch of programmes that help entrepreneurs scale up their businesses.
- To support creative businesses, a comprehensive and targeted approach should be fostered. Special measures can be designed and applied based on the stage of project development, while social background could be taken into consideration to implement the most appropriate support measures for each individual woman business owner.
- It is crucial to not only provide mentorship and financial support to young female entrepreneurs but also invite them to speak at public events and showcase their stories to encourage future generations.
- The development of creative industries should be driven by linking them to related sectors, such as tourism, allowing for scaling up and expansion.
- It is also important to create a methodology for the collection of statistical data at both the national and international levels to evaluate the causes of gender imbalances and track progress.