

FOCUS ON **GENDER** BOSNIA AND HERZEGOVINA



Issue 09

Innovation and Technology for Gender Equality



Sweden
Sverige



This issue of Focus on Gender concentrates on creating innovative solutions to existing barriers that women artists face in Bosnia and Herzegovina. After a detailed analysis, and within the women's economic empowerment portfolio, in 2022 and 2023 UN Women in Bosnia and Herzegovina piloted the Enabling Women Artists Revenue with NFTs (EARN) project in cooperation with the Museum of Contemporary Art of Republika Srpska. The project aimed to bring non-fungible tokens (NFTs) closer to the local artist community and promote

the significant economic potential of this innovation for contemporary art and creative industries. The EARN Project is the first NFT initiative for artists in the region and the first for the United Nations globally. NFTs provide a unique opportunity for artists and creative industries to monetize their work in a new and innovative way. This Focus on Gender aims to showcase how digitalization impacts every segment of our life and how it can be utilized in creating innovative and revolutionary approaches while advancing women's economic empowerment.

In this issue of Focus on Gender, we give an overview of the pilot project “NFT for Women”, as well as the timeline and implemented steps of the project, and provide a list of recommendations for those who are considering piloting NFTs in their respective organizations.



WHY IS INNOVATION AND TECHNOLOGY RELEVANT TO ADVANCING WOMEN'S ECONOMIC EMPOWERMENT?

On a global level, UN Women has been progressing towards the achievement of the ambitious Sustainable Development Goals (SDGs), notably SDG 5 on gender equality and women's empowerment, that requires transformative shifts, integrated approaches, and new solutions. Based on current trajectories, existing interventions will not suffice to achieve the 2030 Agenda. Innovative approaches that disrupt "business as usual" are central to delivering the SDGs for all.

Innovation and technology provide unprecedented opportunities to break trends and reach those who are most likely to be left behind. As the world becomes increasingly digitized, UN Women's new Strategic Plan 2022-2025 reflects on the need to incorporate digital technologies and innovations as tools to accelerate results across thematic areas.¹

UN Women's innovation and technology efforts focus on: supporting industry-wide actions and awareness; promoting women as innovators and entrepreneurs; developing tools and methodologies; preventing online violence against women and girls; and investing in innovation and technologies that advance gender equality and the empowerment of women and girls.²

For UN Women, partnerships are key to accelerate industry-wide change and to remove the barriers to the advancement of women and girls in innovation, technology, and entrepreneurship. UN Women's innovation strategy³ focuses on:

- Building market awareness, investment, and industry-wide actions to grow an innovation market that advances gender equality and empowerment of women and girls;

¹ United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) Strategic Plan 2022-2025; available at: <https://bit.ly/44SFt4L>

² Ibid.

³ UN Women, Making innovation and technology work for women, 2017. Available at: <https://bit.ly/3DXZKLx>

- Developing tools and methodologies with industry partners to take a gender-responsive approach to innovation;
- Promoting women as innovators and entrepreneurs; and
- Investing in innovations and technologies that meet the needs of women.⁴

The importance of digitalization and technology for empowering women and gender equality was also demonstrated at

the 67th session of the Commission on the Status of Women⁵ (CSW67) which took place from March 6 to 17, 2023 and focused on the topic “Innovation, technological change and education in the digital age for achieving gender equality and the empowerment of all women and girls”. Based on the main findings across the priority areas, CSW67 produced eight key recommendations for action by governments and other stakeholders:⁶

<p>1. Prioritize digital equity and inclusion in all national digital policies, to remove the many barriers currently faced by women and girls in all their diversity.</p>	<p>2. Be more strategic on how to leverage public and private investments in the technology sector, so that the digital programs, research, grants, but also procurement expand gender analysis and interventions.</p>	<p>3. Focus on education, to create the conditions for gender-responsive digital learning environments, remove stereotypes, transform STEM education and include digital citizenship teaching in school curricula.</p>	<p>4. Promote the participation, employment and leadership of women in tech and innovation, which requires planning to anticipate future job and skills needs, but also the establishment of labor regulations and protective measures.</p>
<p>5. Adopt gender-responsive technology design, development and deployment, centered around human rights approaches that are informed by socio-economic, political and environmental perspectives.</p>	<p>6. Strengthen fairness, transparency and accountability, by adopting mandatory measures to better identify, prevent and mitigate societal risks and the negative impacts of digital technology on women.</p>	<p>7. Enhance data science to address the current gaps that are preventing us from capturing the gendered dimensions of technological change and make sure the privacy of women’s sensitive personal data is protected.</p>	<p>8. Finally, we need the collective action of public and private sector entities to prevent and eliminate technology-facilitated gender-based violence and protect the rights of women and girls online, through better legislation, increased capacities and new safeguards.</p>

UN Women in Bosnia and Herzegovina initiated the Women’s Economic Empowerment (WEE) Portfolio in 2021 to improve the policy framework for job creation, including perspectives of care economy and entrepreneurship, and the implementation of existing policies through policy coherence between programs for gender equality and promotion of women’s access to decent work. Building on investments in support of gender-responsive policies and budgets, UN Women supports the development and resilience of women-owned businesses and women entrepreneurs and improves the socio-economic position of rural women and their cooperatives. UN Women also continuously seeks to ensure that ICT/STEM education and job opportunities are available and accessible

to girls and women by promoting the network of women in ICT, mentorship programs and using Women’s Empowerment Principles (WEPs)⁷ and other tools to improve gender equality in male-dominated industries.

Since the WEE portfolio inception, UN Women has been supporting relevant stakeholders in the country to advance economic empowerment of women. These efforts are intensifying along the five primary programming streams:

1. Knowledge generation and sharing,
2. Support to women in entrepreneurship,
3. Raising awareness and policy response to the needs and potential of the care economy,

⁴ UN Women. Innovation and Technology. <https://bit.ly/3P1bONu>

⁵ UN Women. Commission on the Status of Women. <https://bit.ly/3P1b4gc>

⁶ UN Women CSW67 Key Messages

⁷ <https://www.weps.org/>

4. Advancing the potential of women in rural areas, and
5. Advancing the role and participation of women in tech-driven industries.

Women entrepreneurs and women-owned businesses, including women artists, face significant structural barriers which limit their growth and resilience to shocks within the economy. These barriers include the lack of access to productive assets, finance and ICTs, insufficient entrepreneurial and management skills, and limited opportunities to access markets, distribution networks and new technologies. Women entrepreneurs also face a lack of access to information and networks to find investments and grow their businesses. This reinforces a negative cycle and prevents them from accessing markets and developing their supply capacity.

According to ILO data, only 36% women in BiH are active in the labor market, which is the lowest percentage in Southeast Europe. According to data from the 2022 Labor Force Survey, out of the total labor force, 61.2% are men and 38.8% are women. In the total number of persons outside labor force, 37.6% are men and 62.4% are women. The employment rate for women is also two times lower than that of men, with 63.2% of employed men and 36.8% of employed women.⁸

Artists, and women artists in BiH in particular, struggle to generate an acceptable income. Based on UN Women's discussions with

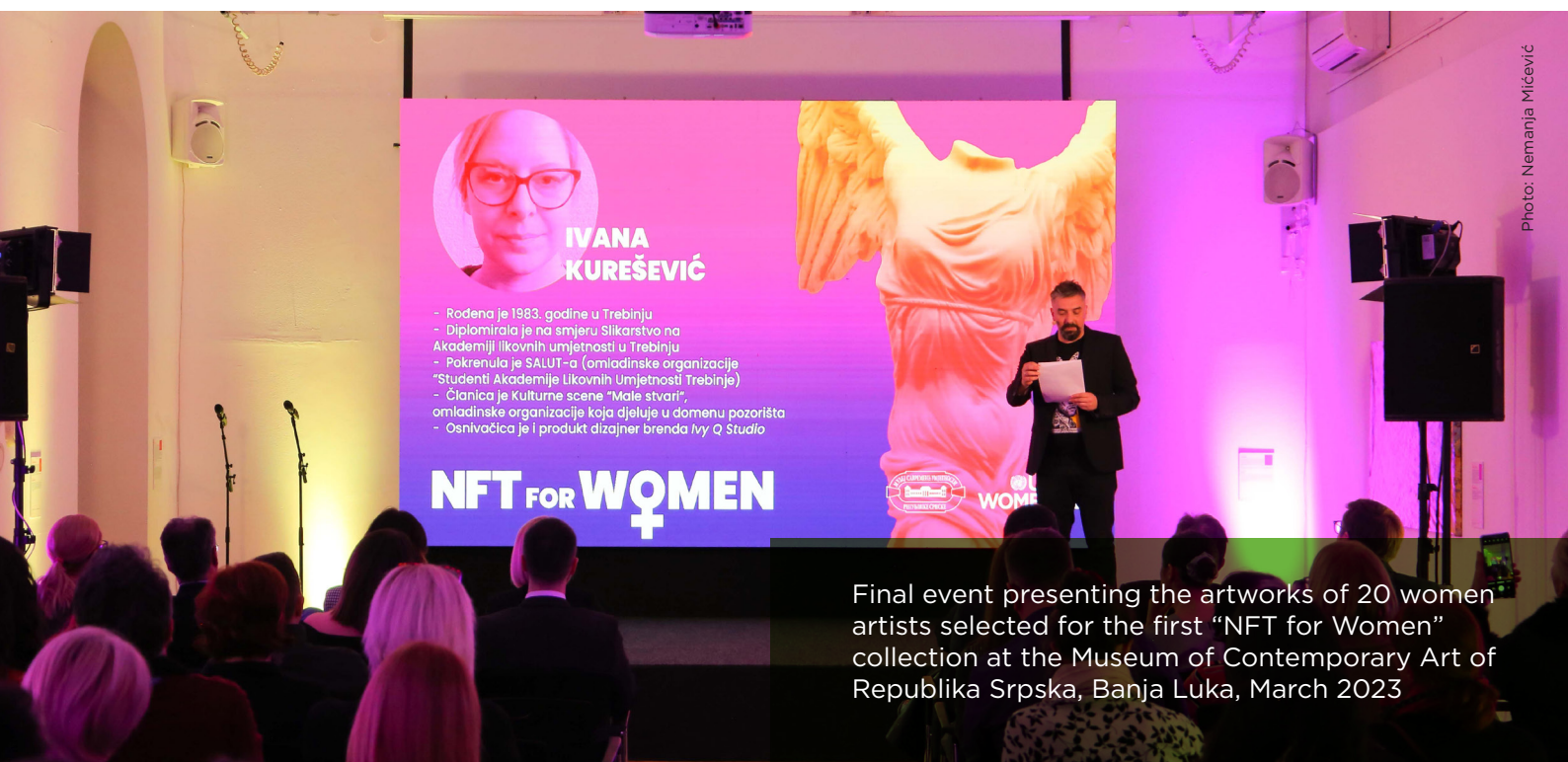
artists, many of them formally registered their businesses to sell their art. However, since the income they generate is not sufficient to cover their basic monthly needs, they are forced to find full-time employment elsewhere. In a nutshell, women artists in Bosnia and Herzegovina are faced with a great challenge to generate income and live from their art.

Some of the key challenges shared with UN Women by women artists across the country are:

- Small or non-existent domestic art market in BiH,
- Legal, financial, and administrative obstacles for exporting art outside of the country,
- Digital and analog copies and/or plagiarism,
- Monopoly position of certain institutions or individuals (sales intermediaries),
- Difficult application of royalties in practice.

However, many disadvantages appeared related to the utilization of digital technologies. Although it brings many benefits and opportunities, the Internet has created a false awareness that artworks are free to use. Internet users download and upload other people's works, copy, reproduce, and often generate income from them. The result is that artists do not have any earnings from copying. This is why UN Women in BiH decided to explore the world of NFTs and try to create a new global market for women artists in the country.

⁸ Labor Force Survey 2022, Agency for Statistics of Bosnia and Herzegovina, 2023. Available at: <https://bit.ly/3qFykqg>



Final event presenting the artworks of 20 women artists selected for the first "NFT for Women" collection at the Museum of Contemporary Art of Republika Srpska, Banja Luka, March 2023



One of the workshops held within the EARN project, in the Center for Culture - Atelier Ismet Mujezinović of Tuzla, 2022

WHAT ARE NFTs?

Non-fungible tokens (NFTs) are a relatively new concept that appeared in 2014, but became popular in 2017. The popularity of NFTs was stable until the market suddenly exploded again in late January 2021. The concept of NFTs may be a challenge to explain to anyone who is not familiar with cryptocurrencies. However, this publication will try to offer simple explanations to bring NFTs closer to all readers.⁹

First, we need to understand the two terms that make up the abbreviation NFT—**non-**

fungible and **token**—before comprehending what it is.

An asset’s fungibility refers to its capacity to be traded in or replaced with another one of equal worth. For instance, because the value is the same, a person can trade two \$10 bills. Non-fungible refers to the fact that the goods’ value vary and they therefore cannot be traded. Digital assets known as “tokens” stand for items, services, or other types of value.



⁹ Production of this publication was supported by Mehmed Bečić and Džana Bašić-Čičak, who were engaged as national experts for NFTs and digital assets on the project “NFT for Women”.

A digital asset representing a priceless item that cannot be changed or replaced is called a Non-Fungible Token, or NFT. Depending on the creator's objectives, NFT can take many different shapes. Every NFT transaction is documented in a blockchain. This metadata includes details on the author, cost, and previous owners.

IBM defines Blockchain as a decentralized, immutable database that makes it easier to track assets and record transactions in a corporate network. An asset might be physical or tangible (a house, car, money, or piece of land) or intangible (patents, copyrights, branding, and intellectual property). Practically anything of value may be recorded and traded in a blockchain network, lowering the risk, and increasing efficiency for all parties.¹⁰

Digital tokens stored in a distributed database or ledger known as blockchain are one of the latest innovations of the digital era (the so-called "distributed ledger technology" or DLT). The distributed ledger and its immutable record of transactions are available to all network users. Transactions are only recorded once with this shared ledger, preventing the duplication present in conventional corporate networks. In recent years, it has become clear that this kind of digital token is a new form of asset. Some tokens, like the popular bitcoin or other tokens, are used as fungible forms of digital assets - such as real-world fungible commodities, money, or gold. Other tokens are used as digital assets that certify authenticity, ownership, or some other right. Just as in the analog world, there is a certificate of ownership of an artwork, real estate, or copyright. These digital tokens are known as non-fungible tokens or NFTs.

NFTs provide a unique opportunity for artists and creative industries to monetize their work in a new and innovative way.

- NFTs allow artists to create unique, one-of-a-kind digital assets, such as paintings, illustrations, music, or videos, as unique, collectible tokens on the blockchain.
- Artists can establish ownership and provenance of their work, which can be tracked and verified without the need for third-party verification, ensuring collectors are purchasing the original work and not reproductions.
- This decentralized model also creates a new global secondary market where artists can sell their work directly to collectors and fans around the world without intermediaries, who in return can resell the art, whilst ensuring that the artist receives ongoing royalties every time their work is resold.
- Blockchain and social media also empower artists to build and manage a global community of collectors and fans to help build their art business, create additional utility for their members, and sell future artworks.
- This can lead to a higher share of the value of their work, greater control over the distribution and use of their work, and the potential for long-term appreciation in value.

Besides, NFT art offers numerous benefits for artists and buyers/collectors. However, many artists are not familiar with NFTs and the economic potential of NFTs for art. Such is the situation with artists and the art industry in Bosnia and Herzegovina.

¹⁰ <https://bit.ly/45s3Sim>



Previous UN Women Representative David Saunders and director of Museum of Contemporary Art of Republika Srpska, Sarita Vujković, at the exhibit of 20 artworks from the “NFT for Women” collection in the National Art Gallery of BiH, April 2023, Sarajevo

NFTs AS AN EARNING OPPORTUNITY

NFTs are a revolutionary way for artists and organizations to build and manage their communities without the need for centralized institutions, like museums and galleries, to

build a trusting relationship between the artist and the collector. Some of the benefits are listed below.

1

Access to the global market

2

Royalties

3

Authentication/ Provenance

4

The simplicity of transforming art into NFT

1. Access to the global market

To access any global market, citizens of Bosnia and Herzegovina face various administrative, legal, and financial difficulties. However, the access to the global NFT market knows no such obstacles - artists from Bosnia and

Herzegovina can be part of this market, just like all others from all over the globe.

When an artist sells his/her artwork as an NFT, he/she offers it to **millions of people around the world**, tapping into a **global market worth several billion dollars**. Statistics for the first

quarter of 2022 show how big this market is - in the first three months of 2022, over \$7.8 billion worth of NFTs were sold in verified transactions, and the average purchase price was \$1,057. Artists sell their artwork directly, simply by uploading their artwork as a file on an NFT platform.



2. Royalties

In practice, artists generally do not have a continuous income from the sold artwork and do not profit from the potential increase in the value of their work. They receive a one-time payment in the form of the purchase price or just a fraction of the price (in case of intermediaries such as galleries, museums, or others). Artwork can be and often is the subject of subsequent sales, often at a significantly higher price than the one the artist received from the first sale. Contracting and paying royalties is not common in practice. Artists face difficulties negotiating royalties when selling their works and must rely on a third party (mediator, court, lawyers) to receive a payment.

These barriers can be solved by NFTs. Since NFTs are programs (smart contracts), an artist can integrate the automatic execution of a **royalty fee payment for each subsequent sale of an NFT**. The artist does not have to monitor further sales since the he/she gets automatically paid a set percentage of the sale price.



3. Authentication/Provenance

NFTs as such cannot be copied or duplicated, as they are **unique items/tokens on the blockchain**. This solves one of the big problems of art on the Internet. Therefore, NFTs will show their true potential with the accelerated development of the so-called Web 3.0. This Web 3 vision aims to create a more democratic online environment. It is based on the notion of ownership, giving the public control instead of the dominant big data businesses and other centralized authorities. This is what decentralization entails. Decentralization enables peer-to-peer economic transactions between Internet users, eliminating the need for middlemen and dispersing control away from central

authorities. The privacy, transparency, and ownership of users are given more attention (Forbes, 2023)¹¹.

One of the biggest problems of the art market are frequent frauds, forgeries, and the disputed origin of the artwork (it is estimated that the share of counterfeits on the global market is between 40 and 60%). In addition, the authentication procedure of the art, which is performed by experts, is a particular problem in the art world.

Authentication of NFTs is not performed by a human. It is **generated by the software/blockchain itself, which makes it safe, objective, unbiased, and infallible**. The same goes for the provenance of art – **the creator and chain of owners are permanently recorded in the blockchain**, from first to last, as well as every transaction – every transfer of an NFT to a new owner, including the date and price of each purchase.



4. The simplicity of transforming art into NFT

In general, any form of art and any object can become a token on the blockchain, but the market practice so far has shown that most art sold as NFTs are digital drawings, digital recordings of real art paintings, collectibles, objects in video games and the metaverse and so on.

It is important to emphasize that creating, selling, or buying NFTs **does not require special computer skills**. Entering the NFT world is achieved through three steps:



Creating a digital wallet – this is the basic tool for creating, buying, and selling NFTs – because NFTs, as well as other digital tokens, are “stored” on a blockchain and “transferred” by a digital wallet.



Buying tokens (digital assets/cryptocurrencies) to buy or mint (creating a unique token on a blockchain) your own NFT.



Register (connect the wallet) on one of the NFT marketplaces/platforms.

¹¹ <https://www.forbes.com/advisor/investing/cryptocurrency/what-is-web-3-0/>



Artist Borjana Mrđa presenting her artwork at the exhibit "NFT for Women" at the Museum of Contemporary Art of Republika Srpska, Banja Luka, March 2023

EARN PROJECT IN BOSNIA AND HERZEGOVINA

In 2022, UN Women BiH established cooperation with non-traditional stakeholders in the field of women's economic empowerment, including art industries. One such partner is the Museum of Contemporary Art of Republika Srpska, which has been actively supporting entrepreneurship opportunities for women artists across the country.

The project aimed to strengthen women artists' skills and capacities to engage in innovation and technology driven initiatives and enhance economic opportunities for women artists in order to enable them to diversify career options and engage in blockchain technology.

The project had five key activities:

1. Raising awareness and education about NFTs and the opportunities that the NFT market offers to women artists in Bosnia and Herzegovina.

2. Announcing and conducting a competition for the selection of 20 artworks that will be minted as NFTs to become part of the first museum NFT collection in the region and sold on the global NFT market.
3. Converting the 20 selected artworks into NFTs (minting) and creating an online virtual gallery in the metaverse format.
4. Promotion of the NFT collection and outreach to NFT communities all over the world.
5. Opening of the auction - sale of 20 NFTs on the global NFT market.

1. Raising awareness and education

The use of NFTs in the field of art is a new phenomenon. Most artists in the world know little or nothing about it. The art community in Bosnia and Herzegovina is not involved in the global NFT market, nor are they familiar with the necessary tools for creating, buying, or selling NFT art.



With that in mind, the first and most important project activity was aimed at raising awareness and educating the art community about:

- What NFTs are,
- How NFTs are used in the field of art,
- What problems are solved using NFTs in the field of art,
- What NFT art markets look like,

- What tools are needed to create, sell, or buy NFTs,
- How to create and sell NFTs, etc.

This activity involved in-person and online workshops and sessions. As part of the in-person workshops, six meetings were held throughout the country. To reach other artists who were not able to participate in the live sessions, 10 online briefings were organized as well.

The sessions covered the economic potentials of NFT art through interactive and multimedia content; discussions on NFTs and digital assets; online course on how to create a crypto wallet, deposit funds into the wallet, buy crypto assets, mint an NFT, explore NFT markets, etc.; and Q&A.

All events were open to the public and were aimed at the art community, both men and women, but with a special focus on women artists from Bosnia and Herzegovina. As a result, more than 250 women were educated on NFTs throughout the country.

2. NFT For Women Competition

Along with raising awareness and educating the art community about NFTs, the Museum of Contemporary Art of Republika Srpska announced a public competition for the selection of 20 artworks that will become part of the museum's first NFT collection to be sold on the global NFT market.

The public call for applications was open from December 1, 2022, to January 30, 2023, and was carried out in parallel with the education and awareness raising activities on NFTs. Over 50 women artists from all over Bosnia and Herzegovina applied for the public call with more than 150 different artworks. After the public call was closed, a five-member jury chose 20 winners of the competition (Lejla Ahmedspahić, Melisa Ahmetović, Maja Dodig, Edita Gazibara, Maja Halilović, Aleksandra Ivanković, Andrea Krnetić, Marina Krsmanović, Ivana Kurešević, Radmila Lizdek, Ana Lukenda, Jelena Medić, Danijela Mihić, Željka Momirov, Borjana Mrđa, Željka Paić, Nastasija Puhalo, Edina Selesković, Amila Šarić, and Alisa Teletović).



3. Minting of NFTs, creation of a virtual online gallery and profile on the NFT marketplace

After selecting the 20 artworks to be part of the collection, the next step was to create digital wallets for the 20 winning artists, mint 20 NFTs for the 20 winning artworks, create a virtual online gallery, and place the 20 NFTs on a prominent NFT trading platform for auction.

A digital wallet is a basic tool for creating, buying, and selling NFTs and generally using digital assets (also called cryptocurrencies). For the women artists to be able to receive money (“ether” coins) for their sold NFTs, it was necessary to create digital wallets for all 20 artists. Twenty online sessions were organized with every artist to assist them in the digital wallet creation.

Digital wallet creation is an immensely important step, considering that the payment and royalties for the NFT sale are paid to artists’ wallets. For this project, women artists received the following:

- One-time: the price for their auctioned/sold NFT,
- Continuous: 5% of the price of each future sale of that same NFT (royalty fee).

After all 20 artists had their digital wallets, 20 NFTs were published on OpenSea, the largest platform for trading NFTs, and an online 3D gallery in metaverse format was created to be available to all interested persons in the country and worldwide.¹²

After creating the NFT collection and presenting the collection on OpenSea and through the online gallery, to raise awareness and interest in the first historic NFT collection of this kind in the region, two events were organized to open the live and online auction for the NFT collection. As part of these events, the 20 women artists had the opportunity to present their artworks (NFTs) to the public, and an auction was launched on the OpenSea platform where seven artworks received an offer.

¹² UN Women EARN Gallery – BiH. Available at: <https://bit.ly/3MDSMRT>

20 selected artworks featured in the “NFT for Women” collection



Eternal Feminine
Edita Gazibara



Decorative selves
Borjana Mrđa



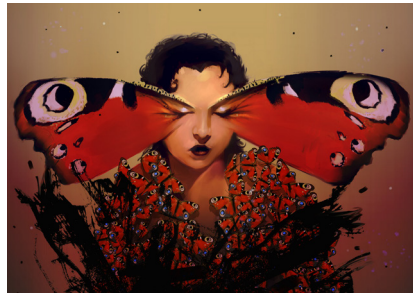
25
Danijela Mihić



SCOBY Dress
Maja Halilović



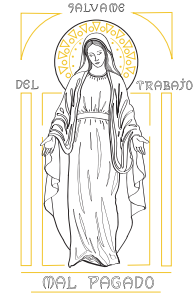
Je ne sui pas une marionnette, mais qui l'este
Maja Dodig



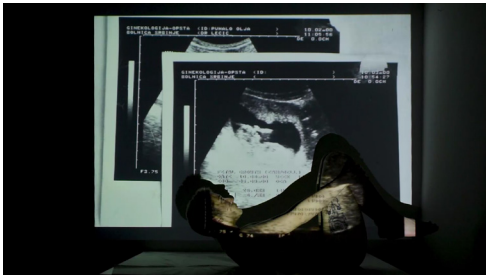
Early 20s
Melisa Ahmetović



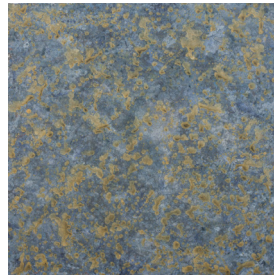
Portrait of my best friend
Amila Šarić



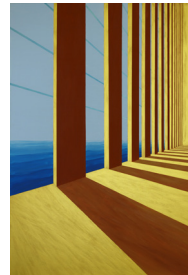
Contemporary prayer: Save me from an underpaid job
Marina Krsmanović



1609 Fixing
Nastasja Puhalo



Note
Radmila Lizdek



Construction
Željka Pajić



Dresscode
Jelena Medić



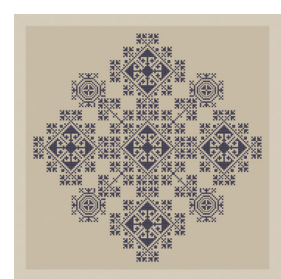
My Unconscious
Alisa Teletović



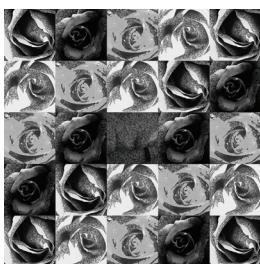
Think Freedom
Edina Selesković



Ecosystem
Lejla Ahmedspahić



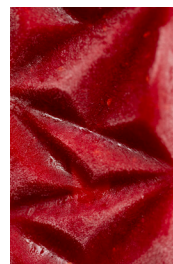
Zmijanje Embroidery Composition
Aleksandra Ivanković



And now what
Željka Momirov



The Herd and the Red Dog
Andrea Krnetić Grbić



Velvet Ice
Ana Lukenda



Me too
Ivana Kurešević

RECOMMENDATIONS

Digitalization impacts every segment of our everyday life and it can be utilized to create innovative and revolutionary approaches. With EARN Project, UN Women BiH wanted to demonstrate the possibility of using new technologies in the service of art and creative industries while providing women artists with access to the global market. Ultimately, the goal of the project was to help women artists sell their works within the new digital art market and thereby achieve economic prosperity.

The project demonstrated high replicability in different areas of work. In case you are an artist, or an organization interested in piloting NFTs in your respective programming areas, be aware of the following:

1

Liaise with a local company for the minting process

You can encounter several technical and administrative difficulties related to the NFT minting process. In the case of EARN project, minting was performed by a third party, instead of letting artists perform the minting, due to technical difficulties in connecting 20 different NFTs into one collection and due to the fact that in order to mint the NFTs, every artist has to have a certain amount of digital assets (cryptocurrency) in their digital wallet. This means exposing the artists to additional costs and making the technical preparation of the entire process more difficult. Use a local company in the minting process to make the communication on minting less complicated and get access to the company's customer base, which can be used for successful outreach later on.

2

Diversify the NFT offerings

While the digital art market is currently the most popular NFT category, there are numerous other uses for NFTs that can be explored. Consider expanding the NFT offerings beyond just digital art, such as gaming assets, virtual real estate, collectibles, and more.

3

Partner with creators in identifying the project topic

Collaborate with artists, and other creators to create exclusive NFTs that are unique to the topic assigned. Giving all project participants a direction makes it easier to build the story behind it and paves the way to successful market reach.

4 Explore new marketplaces

While OpenSea is currently the largest NFT marketplace, there are numerous other emerging platforms that cater to specific niches. Consider expanding your presence to other marketplaces to reach new audiences.

5 Offer flexible payment options

While cryptocurrency is the preferred payment option for NFTs, not everyone has access to it. Consider offering other payment options, such as credit card payments, to make it easier for potential buyers to purchase NFTs on your platform.

6 Offer extensive education and support

As NFTs are still a relatively new concept, many people may not fully understand how they work. Offering educational resources and customer support can help potential buyers feel more confident in their purchases and help drive sales.

7 Build a community

UN Women BiH created a database of different stakeholders locally and abroad that may be interested in buying NFTs. NFTs in BiH are a relatively new concept and outreach to the international community, private sector, diaspora, discord channels and others, were of utmost importance to the project. However, NFTs are still a new concept in the world as well, and building a community around the platform can help generate interest and create a sense of exclusivity. Consider hosting events, contests, and giveaways to engage with your audience and build a loyal following.