

# ANALYSIS OF THE CURRENT LEARNING PERSPECTIVES ASSISTING THE DIGITAL TRANSFORMATION OF SENIOR MUSICIANS

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## Introduction

This analysis is drafted under the Erasmus+ funded project - Empowering Digital Transformations for Senior Musicians (2023-1-BG01-KA210-ADU-000152921). The project aims to address the technical skills gap among senior musicians, enabling them to access the digital supply chain, develop new audiences, and restore their competitiveness in an increasingly digital world. This analysis will serve as the basis for the development of a targeted training programme designed to support senior musicians in their digital transformation journey.

All project proposals under the Erasmus+ Programme should contribute to one or more of the programme's policy priorities. Relevant priorities according to the objectives of this project include:

- HORIZONTAL: Addressing digital transformation through the development of digital readiness, resilience, and capacity.
- ADU: Creating and promoting learning opportunities among all citizens and generations.
- ADU: Promoting local learning centres and innovative learning spaces.

# 1. Project Objectives

The main objective of this project is to assist senior musicians in realizing a digital transformation by developing tailored guidelines and providing training. The project aims to:

- Teach senior musicians how to use technology for various professional purposes.
- Help them keep up with changes in technology.
- Disseminate project activities and findings to motivate senior individuals, particularly those in the creative industries, to embrace the digital shift.

# 2. Project Focus & Target Groups

The project addresses multiple priorities with its specific focus on developing a support program, a training centre for digital upskilling, and running a pilot training bootcamp specifically designed for senior musicians' digital transformation. This research indicates that there are currently limited freely available educational resources corresponding to the accessibility needs to help senior musicians bridge the intergenerational gap and transition to digital technology, leaving them entirely out of the digital supply chain.

Senior musicians face challenges in adapting to digital technologies. These individuals often have extensive musical knowledge and experience but lack the digital skills necessary to navigate today's music industry. The project aims to equip them with the technical knowledge and confidence needed to integrate digital tools into their creative and distribution processes. By focusing on senior musicians, the

project addresses a crucial need for inclusivity and support of an excluded group in a rapidly digitizing field.

Another key target group is music educators who can play a pivotal role in facilitating the digital upskilling of senior musicians. These educators will be provided with specialized training resources and materials that they can use to teach digital skills in a way that is accessible and engaging for senior learners. By involving music educators, the project ensures that the training methodologies are pedagogically sound and effective, and that the educators are empowered to support senior musicians in their digital journeys.

Community leaders and cultural organizations are also vital target groups for this project. These entities can help create and promote community-based initiatives that support the digital transformation of senior musicians. By hosting workshops, events, and collaborative projects, community leaders can foster an environment of intergenerational learning and support. Cultural organizations can provide venues, resources, and platforms for senior musicians to showcase their digitally-enhanced work, thus encouraging broader community engagement and participation.

### **3. Analysis Scope**

This analysis encompasses a comprehensive review of digital resources related to the creation, production, distribution, access, and participation in the creative and music fields. It examines the technology landscape, including available software, web, and mobile applications, that are crucial for artists and creators in these industries. Special attention is given to the availability of training programs and open educational resources (OER) that the target groups can freely access to acquire digital skills.

In addition to reviewing digital tools and platforms, this analysis incorporates data from official sources, such as reports from Eurostat, the European Commission, and

other relevant organizations. These data sets provide insights into digital literacy levels across different demographics, especially among older adults and marginalized groups, who are often underrepresented in digital transformation initiatives. By integrating findings from these official sources, we aim to highlight existing gaps in digital access and competence, particularly in the context of the Creative and Cultural Industries (CCI).

Furthermore, the analysis seeks to draw meaningful conclusions by synthesizing survey data and official statistics. This combination of quantitative and qualitative data allows for a deeper understanding of the digital challenges faced by older musicians and creators in adapting to the high technicality of digital tools in fields like music production and distribution. The ultimate goal is to identify actionable recommendations that can support the digital inclusion of these groups and improve their participation in the rapidly evolving digital ecosystem of the CCI industries.

## **4. Challenges for Senior Musicians**

The digitalisation of society has created an intergenerational gap, posing a significant obstacle for senior musicians to stay present, connect with audiences, and establish a digital presence. Senior musicians often struggle with using technology due to a lack of knowledge, time constraints, or the high technicality of digital tools. This prevents them from reaching digital audiences and promoting themselves on streaming platforms like Spotify, Amazon Music, Apple Music, or social media platforms such as Facebook, Instagram, TikTok, YouTube, Twitter, and others.

These challenges stem from various factors, including technological barriers, a lack of digital literacy, and the complexities of digital rights management. Here are some key obstacles that senior musicians encounter:

- **Technological Barriers:** Many senior musicians are not as familiar with the latest digital technologies as their younger counterparts. The rapid pace of technological advancement can make it difficult for them to keep up with new tools and platforms required for digital music production and distribution. This can include anything from understanding how to use digital audio workstations (DAWs) to navigating online distribution services.
- **Lack of Digital Literacy:** Digital literacy involves more than just basic computer skills; it encompasses understanding how to create, manage, and distribute digital content. Senior musicians might struggle with aspects such as setting up online profiles, uploading music to streaming services, or using social media effectively for promotion. This lack of digital literacy can prevent them from fully participating in the digital music economy.
- **Complexity of Metadata Standards:** The digital supply chain relies heavily on metadata standards like DDEX (Digital Data Exchange) to manage and distribute music. These standards are highly technical and can be daunting for those without a background in digital technology. For senior musicians, the complexity of accurately tagging their music with the correct metadata—such as genre, rights information, and ownership details—can be overwhelming.
- **Digital Rights Management:** Copyright in the digital age can get very complicated. Understanding and managing digital rights is crucial for protecting intellectual property and ensuring fair compensation. Senior musicians might find it challenging to navigate digital rights management (DRM) systems, which are designed to control how their music is used and distributed online. Mismanagement of digital rights can lead to revenue loss and unauthorised use of their work.

- **Access to Resources and Training:** Many senior musicians do not have access to the necessary resources and training to bridge these gaps. While there are various online tutorials and courses available, these may not always be tailored to their specific needs or learning styles. Furthermore, finding training programs that cater to senior musicians can be difficult, leaving them without the support they need to succeed in the digital realm.
- **Economic Barriers:** The cost of acquiring new technology and software can be prohibitive for many senior musicians, especially those on fixed incomes. Investing in the necessary equipment, software, and online services to participate fully in the digital supply chain requires significant financial outlay, which may not be feasible for everyone.
- **Integration with Legacy Systems:** Many senior musicians have accumulated extensive analog or early digital archives that are not easily integrated into modern digital platforms. Digitising and updating these archives to meet current standards can be a complex and resource-intensive process, often requiring professional assistance.
- **Scalability Challenges:** Even when senior musicians manage to digitise their work and enter the digital supply chain, scaling their operations to reach a broader audience can be challenging. The digital marketplace is crowded and competitive and standing out requires a deep understanding of digital marketing, audience engagement, and analytics.

- **Isolation from Digital Networks:** Senior musicians might be less connected to digital networks and communities that can offer support, collaboration opportunities, and exposure. These networks are often vital for discovering new platforms, sharing best practices, and gaining visibility in the digital space.
- **Psychological Barriers:** Finally, there can be a psychological barrier related to the perceived complexity and fast-paced nature of digital technologies. Many senior musicians might feel intimidated or overwhelmed by the need to learn and adapt to these new systems, which can deter them from engaging fully with the digital supply chain.

Addressing these obstacles requires targeted interventions, such as specialized training programs, mentorship opportunities, and financial support initiatives. By providing senior musicians with the necessary tools and knowledge, organizations like Digital Partnerships for Creative Europe (DiPaCre) can help bridge the digital divide, ensuring that these artists can continue to share their talent and creativity with the world.



## 5. Empirical Data and Findings

In 2022, Eurostat reported that “In 2021, the share of people aged 16 to 74 who had at least basic overall digital skills was highest in the Netherlands and Finland (both 79%), followed by Ireland (70%). On the other hand, the lowest share was recorded in Romania (28%), followed by Bulgaria (31%) and Poland (43%). The Digital Compass sets out an aim for 80% of EU citizens aged 16-74 years old to have at least basic digital skills by 2030”<sup>1</sup>.

Additionally, the European Agency for Fundamental Rights’ report published in September 2023 revealed that “There is little evidence of national initiatives to provide digital skills training for older persons or to offer financial support for reliable internet access or up-to-date devices and software. This is despite national authorities’ efforts”<sup>2</sup>. The same report states, “Only one in four people aged 65 to 74 in the 27 EU Member States have at least basic digital skills.”

The article “How ‘basic’ is basic digital literacy for older adults?”<sup>3</sup> from *Frontiers in Education* explores the difficulties older adults face when acquiring digital literacy skills, particularly those with limited or no prior experience with digital technologies. It argues that even entry-level digital tasks, such as operating devices or downloading apps, can be challenging for this demographic. The study is based on interviews with 26 digital instructors who teach older adults and identifies three key problem areas: ICT jargon, hardware usage, and software navigation.

The State of the Digital Decade report, published in 2023, emphasized that only 28% of people aged 65-74 possess basic digital skills, compared to 70% in the 16-24 age

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<sup>1</sup> Eurostat: “How many citizens had basic digital skills in 2021?” -Source: [https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220330-1#:~:text=In%202021%2C%20the%20share%20of,%25\)%20and%20Poland%20\(43%25\)](https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220330-1#:~:text=In%202021%2C%20the%20share%20of,%25)%20and%20Poland%20(43%25).).

<sup>2</sup> European Union Agency for Fundamental Rights - “Fundamental rights of older people: ensuring access to public services in digital societies” - <https://fra.europa.eu/en/publication/2023/older-people-digital-rights?page=1#read-online>

<sup>3</sup> “How “basic” is basic digital literacy for older adults? Insights from digital skills instructors” 2023 - <https://www.frontiersin.org/journals/education/articles/10.3389/educ.2023.1231701/full>

group. This gap is particularly alarming, as older adults remain at the highest risk of digital exclusion, especially in rural and underserved areas.<sup>4</sup>

Similarly, the 2023 report on the State of the Digital Decade emphasized that the EU's digital transformation requires urgent action. The report outlines that 40% of EU adults lack basic digital skills, and only 37% of adults participate in regular digital training.<sup>5</sup>

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<sup>4</sup> Digital Skills & Jobs Coalition Luxembourg – "2023 Report on the State of the Digital Decade" - <https://digitalskills.lu/article/2023-report-on-the-state-of-the-digital-decade/>

<sup>5</sup> Source: European Commission: Digital Skills & Jobs Platform - <https://digital-skills-jobs.europa.eu/en/actions/european-initiatives/report-state-digital-decade-2023>

## 6. Digital Skills and the Creative Industry

With the rapid digitalization of the creative industries, senior musicians are particularly excluded from exercising their profession due to high technical barriers. The digital supply chain is complex and difficult for independent players of all ages, especially senior musicians. “New artistic, managerial and technical skills are needed in this new playground, hence new professional figures, who have the native ability to think digitally”.<sup>6</sup>

To thrive in the digital environment, senior musicians must acquire specific skills beyond their musical knowledge. Merely possessing musical expertise is insufficient to sustain a career in the digital realm. The limited number of management companies operating within the digital supply chain that are willing to onboard senior musicians is indicative of broader issues. These issues include not only age discrimination but also geographical discrimination.

### Computer Literacy:

Senior musicians must become proficient in using computers and troubleshooting technical issues. This includes basic office skills such as email communication, word processing, spreadsheets, and efficient web browsing, including using search engines effectively. Developing these skills will enable them to manage their careers more flexibly. Effortless internet use will provide access to a wealth of educational resources and tutorials, expediting their learning process.

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<sup>6</sup> MIH - DIGITALIZATION IN MUSIC AND THE ROLE OF MUSIC-TECH COMPANIES URL: [https://www.musicinnovationhub.org/wp-content/uploads/2020/10/Digitalization\\_in\\_music.pdf](https://www.musicinnovationhub.org/wp-content/uploads/2020/10/Digitalization_in_music.pdf)

## **Digitalization Skills:**

It is highly beneficial for senior artists to learn CD extraction and file encoding techniques. These skills will allow them to digitize their back-catalogue from the pre-digital age, aiding their digitalization efforts independently.

## **Digital Music Production:**

Senior musicians need to develop skills in digital music production. While this is a comprehensive and long-term endeavor that encompasses advanced computer skills as well as mixing and production abilities, mastering these skills will enable them to work with audio and MIDI file formats, enhancing their flexibility in managing their repertoire libraries. This broad task can be subdivided into multiple categories of more specific tasks.

## **Graphic Editing Skills:**

Publishing content online involves photo editing and file organization. When releasing music on streaming platforms, specific requirements for file formats, sizes, and image dimensions must be met. Senior musicians should learn to transfer photos from mobile devices to computers for basic editing tasks, such as applying text to photos to create promotional banners or performing basic photo manipulation. Additionally, gaining proficiency in using scanning devices will allow them to digitize their back-repertoire, bringing it into the digital domain.

## **Social Media Marketing and Metadata Management:**

To effectively promote their music and reach wider audiences, senior musicians must develop skills in social media marketing. This includes creating and managing profiles on platforms like Facebook, Instagram, YouTube, and Twitter, as well as understanding how to engage with audiences and grow their online presence. Additionally, they must learn metadata management to ensure their music is easily discoverable and properly categorized on streaming services and digital platforms. Understanding and utilizing metadata is crucial for tracking and managing their digital content, improving visibility, and ensuring accurate royalty distributions.

Acquiring these skills will empower senior musicians to navigate the digital landscape more effectively, ensuring they can sustain their careers and continue contributing to the creative industry. By bridging the digital skills gap, senior musicians can overcome the barriers posed by the modern digital supply chain and remain active and influential in the evolving music industry.

## 7. Digital Inclusion and Ageism

Ageism, or discrimination based on age, remains a widespread issue across various sectors in the European Union. According to the 2023 Eurobarometer Report<sup>7</sup>, 45% of Europeans believe that age discrimination is prevalent, and 52% mention age as a primary criterion that may disadvantage candidates during recruitment processes. This percentage has increased by five points since 2019, reflecting growing concerns over ageism in employment.

According to AGE Platform Europe, “The 2022 Baromètre de l’Inclusion numérique / Barometer voor digitale inclusie (Digital Inclusion Barometer) published by the King Baudouin Foundation shows more citizens than ever have access to digital technology and use digital services. Furthermore, socio-economically and culturally vulnerable people benefit less from the increasing digitisation than people with more privileged background.

“Many people, especially the most vulnerable, find it difficult to jump on the digital bandwagon.”<sup>8</sup>

The same analytical material quotes:

- “The definitions of ‘old age’ in relation to digital technology often varies from age 50+ to 75+. This grouping often does injustice to the fact that older persons are a highly diverse population group. People have different opportunities and resources to access and profit from contemporary digital advancements. Against widespread stereotypes, which devalue older individuals as less able and unwilling to learn and engage in new digital technology, evidence proves the opposite. A great proportion of older

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<sup>7</sup> European Commission: EU Science Hub - Addressing ageism: a key priority for a society of longevity - [https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/addressing-ageism-key-priority-society-longevity-2024-07-11\\_en](https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/addressing-ageism-key-priority-society-longevity-2024-07-11_en)

<sup>8</sup> AGE Platform Europe - “Digitalisation of services: ensuring equal access to all, including older people of today and tomorrow” - <https://www.age-platform.eu/digitalisation-of-services-ensuring-equal-access-to-all-including-older-people-of-today-and-tomorrow/>

persons report high willingness to learn to use new digital technology and consider many digital technologies as relevant to their lives.” – EuroAgeism, Policy Brief (2021) “Ageism and Digital Technology”.<sup>9</sup>

- “The digital divide between younger and older people is due in part to ageism. The prevailing stereotype that older people cannot master technologies is often internalized by older adults (an example of self-directed ageism), who may therefore not even try to adopt new technologies, even when they are both available and affordable.” – World Health Organization, Policy Brief Ageism in artificial intelligence for health (Feb. 2022).<sup>10</sup>

Digital ageism presents significant challenges within the Creative and Cultural Industries (CCI), particularly in sectors such as the music industry, where rapid digitalization and high levels of technicality dominate the landscape. As streaming platforms become the primary means of music distribution, older professionals in the industry often find themselves marginalized due to their limited familiarity with complex digital tools and platforms. The demand for digital fluency in areas like metadata management, audio production using virtual studio technologies (VSTs), and monetizing music through streaming services can be overwhelming for older musicians who built their careers pre-digitalization. This creates a widening generational gap, with younger, digitally native artists thriving, while older professionals struggle to adapt, further exacerbating existing ageism in an industry that often prioritizes novelty and innovation.

The exclusion of older individuals from the digital transformation of the CCI industries reflects broader societal trends of digital ageism, where technical proficiency is valued over experience, leading to reduced opportunities for older artists and creators. Addressing these challenges will require targeted educational programs, skills training, and policy interventions aimed at bridging the digital divide and ensuring

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<sup>9</sup> EuroAgeism - <https://euroageism.eu/wp-content/uploads/2021/03/Ageism-and-Technology-Policy-Brief.pdf>

<sup>10</sup> World Health Organization, Policy Brief Ageism in artificial intelligence for health (Feb. 2022) - <https://www.who.int/publications/i/item/9789240029256>

that older generations are not left behind in the age of streaming and digital content creation.



## 8. Our Survey

Our survey aimed to assess the digital readiness, skills, and attitudes of musicians towards digital tools and technologies. The respondents include musicians from four countries: Turkey, Romania, Bulgaria, and Spain. A total of 43 responses were collected, providing insights into their experiences with digital music production, distribution, and skill improvement efforts. The survey sought to understand their familiarity with concepts like metadata and VST (Virtual Studio Technology), their use of digital platforms, and the challenges they face in adapting to digital transformation in the music industry.

### Demographic Overview:

- **Country Representation:** Respondents were evenly distributed among Turkey, Romania, Bulgaria, and Spain, with 10-11 participants per country.
- **Age Distribution:** The majority were aged between 50-55, followed by those aged 60-65. This reflects a mature group of musicians, many with decades of experience.
- **Gender:** The sample comprised 28 males and 15 females, indicating a relatively diverse gender representation.
- **Ethnicity:** Most respondents identified as White (28), while others identified as Roma (11), Asian (2), and Mixed/Other (1). This diversity allowed for a range of perspectives on the digital transformation of the music industry.

## **Education and Professional Background:**

- **Formal Music Education:** Approximately 53% (23 respondents) have formal music education, while 47% do not, suggesting a mix of self-taught and formally trained musicians.
- **Second Job:** Most respondents (72%) have a second job outside of their music careers, reflecting potential economic challenges in sustaining a full-time career in music, especially for older musicians.
- **Experience as Musicians:** A significant number of respondents have over 11-20 years of experience, with a smaller number having over 50 years of experience, indicating a seasoned group familiar with both traditional and emerging trends in music.

## **Digital Access and Usage:**

- **Computer Ownership and Usage:** 35 respondents own a computer, but only 8 use it daily, while the remaining 6 reported that they do not use a computer regularly. This highlights a gap in digital access or confidence in using digital tools for their music practice.
- **Smartphone Ownership:** Most respondents (42) own a smartphone, indicating potential for mobile-based learning and digital engagement.
- **Internet and Social Media Usage:** All respondents use the internet, and 40 out of 43 use social media platforms like Facebook, YouTube, and TikTok. However, only a portion actively engages with these platforms for their music promotion.

## **Digital Skills and Ease of Use:**

- Use of Computers for Music Production: Around 51.2% of respondents disagreed with the statement, "I use a computer to record and edit my music," indicating limited integration of digital tools into their creative process.
- Ease of Recording/Editing: 50% of respondents find it challenging to record and edit music using a computer, suggesting a need for user-friendly tools or training in digital music production software.

## **Interest in New Technologies:**

- Production: 27 respondents expressed disinterest in using new technologies for music production, showing a potential resistance or lack of exposure to digital tools.
- Distribution: 29 respondents had similar sentiments regarding digital distribution, which is crucial in today's streaming-dominated industry.
- Ease of Uploading Music Online: Many respondents (31) find it difficult to upload their music online, highlighting a technical barrier to effectively using streaming platforms.

## **Understanding of Key Digital Concepts:**

- Metadata: 30 respondents do not understand what metadata is, a key component in music cataloging and distribution.

- VST (Virtual Studio Technology): Similarly, 37 respondents lack knowledge of VST, a standard tool in digital music production. This gap indicates an area for targeted digital education to improve their production capabilities.

### **Efforts to Improve Digital Skills:**

- Attempts to Improve Skills: Around 25 respondents reported that they have tried to improve their digital skills, but 18 either did not or faced difficulties in finding suitable learning resources.
- Ease of Finding Learning Materials: A significant number found it challenging to discover relevant educational content, suggesting a need for more accessible and tailored learning materials for musicians.

### **Monetization and Digital Presence:**

- Monetizing Through Streaming: 40 respondents strongly disagreed that they are successfully monetizing their music through streaming platforms, reflecting a widespread challenge in generating income through digital means.
- Digital Presence: Only a few respondents maintain a digital audience through social media or YouTube, but most of them lack a structured approach to building an online fanbase.

## 9. Results Summary

The survey results paint a complex picture of the digital readiness of senior musicians across Turkey, Romania, Bulgaria, and Spain. The findings underscore the following critical conclusions:

### Digital Skills Gap and Reluctance

- Despite access to computers and smartphones, 51.2% of respondents disagreed with the statement, "I use a computer to record and edit my music," revealing a considerable gap in integrating digital tools into their creative processes. This reluctance to embrace digital tools may stem from a lack of familiarity or confidence in using such technologies.
- Similarly, 50% of respondents find it difficult to record and edit music using a computer, indicating a need for user-friendly software or better training resources. This suggests that even among those who have access to technology, there is a significant learning curve that needs to be addressed.

### Limited Understanding of Essential Digital Concepts

- The survey revealed that 30 out of 43 respondents do not know what metadata is, which is crucial for cataloging music correctly and ensuring visibility on streaming platforms. This knowledge gap can directly impact their ability to optimize their music for online distribution.

- 37 respondents lack knowledge of VST (Virtual Studio Technology), a standard in digital music production. This suggests that many musicians are not leveraging the full potential of modern production tools, which could limit the quality and scope of their work in a competitive market.

## **Challenges with Digital Distribution and Monetization**

- The results highlight those 40 respondents strongly disagreed with the statement, "I monetize my music through streaming platforms," reflecting a widespread challenge in converting online presence into income. This points to a need for strategic guidance in monetizing digital content and understanding the mechanics of streaming revenue.
- 29 respondents expressed disinterest in using new technologies for music distribution, which is a crucial aspect of reaching new audiences in the digital era. This reluctance suggests that many musicians may not fully recognize the value of adapting to new digital distribution channels, potentially limiting their reach and revenue opportunities.

## **Struggles with Digital Promotion**

- While most respondents use social media platforms like Facebook and YouTube, their effectiveness in using these channels for music promotion varies. Only a minority reported maintaining a structured digital audience through platforms like a fan page or YouTube channel, indicating a potential area for growth through digital marketing training.
- Additionally, 31 respondents find it challenging to upload their music online, indicating that technical barriers might prevent them from effectively using streaming platforms or other digital distribution methods. This challenge is a

significant roadblock in the digitalization journey of these musicians, affecting their ability to share their work with broader audiences.

## **Efforts to Improve Digital Skills**

- A positive sign is that 25 respondents have made attempts to improve their digital skills, showing an awareness of the importance of staying updated with digital trends. However, 18 respondents faced difficulties in finding suitable learning materials, highlighting a gap in the availability of accessible and relevant resources for mature musicians.
- The willingness to learn, combined with the difficulties in accessing resources, suggests an opportunity for the development of tailored educational content that specifically addresses the needs of mature musicians, including basic to intermediate courses in digital music production, marketing, and monetization.

## **A Diverse But Struggling Group**

- The respondents represent a seasoned group of musicians with over 11-20 years of experience, yet many still find themselves struggling to adapt to the digital era. Their experiences suggest that while their artistry and creative output remain strong, the shift towards digital tools and platforms poses a significant challenge.
- This indicates a need for programs that blend their extensive musical knowledge with digital skills training, allowing them to adapt without feeling overwhelmed or disconnected from the evolving landscape of the music industry.

## 10. Executive Summary

The survey highlights the urgent need to bridge the gap between traditional musicianship and the digital skills required in today's music industry. As digitalization continues to transform how music is produced, shared, and monetized, it is essential to provide mature musicians with the tools and training necessary to thrive in this environment.

Programs focusing on basic digital literacy, understanding metadata, using VSTs, and effective online promotion could make a significant impact. Additionally, initiatives to simplify access to digital platforms and offer step-by-step guides for online monetization could empower these musicians to unlock new revenue streams and broaden their reach.

The findings suggest that while there is a mixed level of enthusiasm toward adopting new production and distribution technologies, there remains a strong foundation to build upon. With the right support, these musicians can leverage their years of experience and creativity to adapt to new platforms, reach new audiences, and continue to contribute meaningfully to the cultural landscape.

By addressing these barriers, the industry can ensure that these mature musicians remain active and influential, preserving the rich diversity of musical expression in a digital world. The path forward lies in creating an environment where technology enhances, rather than replaces, the timeless skills and artistry of these musicians.



# 11. Training Resources Analysis

To thoroughly understand the current learning landscape and identify valuable resources for digital upskilling of senior musicians, we conducted an extensive analysis. While some findings may be relevant and beneficial, our research revealed that most of the existing content is not entirely suitable for senior musicians. Additionally, many resources present accessibility barriers due to language or financial factors.

As an example of exemplary practice, we discovered that in Spain, all councils and municipalities are actively engaged in delivering digital upskilling programs for seniors. This initiative is commendable as it significantly enhances access to digital knowledge while simultaneously reducing both accessibility and financial barriers. By providing these essential resources at the local level, Spain is ensuring that senior musicians, along with other older adults, are equipped with the necessary skills to navigate and thrive in the digital landscape.

Financial barriers are indeed a critical issue. Many comprehensive digital music production and marketing courses come with high enrollment fees, making them inaccessible for senior musicians who might be on fixed incomes or have limited financial resources. Additionally, platforms offering valuable resources often operate on subscription models, requiring continuous payment, which can be a financial burden for many senior musicians.

Language barriers also pose a significant challenge. Many digital music production courses are available exclusively in languages other than the native languages of many senior musicians. For instance, high-quality tutorials on platforms like YouTube and Udemy are often in English, which poses a significant challenge for non-English-speaking musicians. There is a lack of localized content tailored to the linguistic and cultural contexts of various regions. For example, a senior musician in Bulgaria might find it difficult to follow a course designed for English-speaking audiences, even if the technical content is relevant.

The suitability of content also raises concerns. A significant portion of available resources is designed for younger audiences or those with a higher level of pre-existing digital literacy. The technical jargon and fast-paced instruction often do not account for the learning pace of senior musicians. Furthermore, many courses focus on contemporary genres and digital music trends that may not align with the traditional styles that many senior musicians are familiar with or interested in.

In our analysis of resources from different countries, we found several examples illustrating these issues:

- Udemy (Global): One of the most popular learning platforms globally is offering a course on music production for beginners. The curriculum seems quite basic and rather short, consisting of short video tutorials. Although the course content is not particularly developed for seniors in mind, it may be helpful for those possessing already some basic digital music production skills. However, the course content is developed in English which may create a language barrier for some learners. There is a small fee of £29.99, which may become a financial barrier for some.
- Seniors Guide to Computers (Global): Offers free of charge basic computer training including how to use web browsers, set up accessibility, send emails, and other tasks. However, the educational materials are vague, only in English, and the outdated interface may be difficult for seniors to navigate.
- Informática Madrid Mayor (Spain): The Madrid City Council offers various courses in basic computing, internet, image and video processing and social networks for senior citizens. The courses are free of charge and combine classroom and online training. They can be of great help to introduce seniors to a basic level of computer literacy. In fact, almost all the Autonomous

Communities (17) in Spain have their own services of the same type. We have chosen Madrid because it is the capital of Spain. This is a wonderful example of good practice and an indicator that councils should fulfil their duties of care towards excluded groups of residents and ensure that the issue with digital exclusion is resolved effectively using public funding.

- Her Yaşta Dijital - Digital at Every Age (Turkiye): This initiative from the Istanbul Municipality in Turkey is an example of good practice by a local government and provides an application specifically designed for residents aged 65 and older. The program offers free digital upskilling education to combat digital exclusion among seniors. While effective for its target group, it excludes younger seniors who are also affected by digital challenges. For this reason, our project shifts focus to include those aged 55 and older, recognizing that digital struggles impact this broader age group as well.
- Digital Literacy Education for the Elderly (Turkiye): Spearheaded by Turkiye's Ministry of Family and Social Services, this program has provided digital literacy training to 1,514 elderly individuals across 34 provinces in Turkey. It aims to equip older adults with necessary digital skills, although it predominantly targets those who are traditionally considered 'elderly'.
- Internet Safety Training for Seniors (Turkiye): This training, also offered by the Ministry of Family & Social Services in Turkey, focuses on safe internet usage for seniors. It helps older adults navigate the complexities of the internet securely. Although not directly related to digital upskilling for creative industries, internet threats for seniors is an issue and therefore this training resource is valuable.
- Inregistrari Audio (Romania): The portal is offering various courses in digital production; however, the courses are not specifically tailored for the needs of senior musicians, and they may have to possess basic computer skills before being able to benefit from this content. They are rather targeted at the general

audience. Whilst the provider has some course content available on YouTube, free of charge, the portal is indicating a fee for access to the courses content which is affecting the accessibility for some senior musicians.

- GCF Learn Free (Global): Features more than 200 free online computer classes ranging from core skills to work-based tools. The modern interface is helpful, but the courses are not tailored specifically for senior musicians and are only available in English and Portuguese. However, some of the content will be useful for senior musicians.
- City Academy (Global): The academy is offering online based course for beginners in music production. The curriculum is well-developed and comprehensive and based around theory and practice. However, the content is in English, so this may affect the accessibility of some senior musicians who are not fluent in this language. Also, there is a course fee of £350, which may be an obstacle for access for financially disadvantaged groups.
- Khan Academy (Global): The platform is a free learning platform offering a variety of courses. Although, we could not discover any music production related courses, neither one for basic computer skills (most of the computer sciences are targeted at intermediate to advanced students), we have found a course related to social media skills which is a necessary skill for the senior musicians for them to practice their profession in the digital world. However, the course content and the website interface would be accessible only by intermediate students and it is offered in English, which may create accessibility barriers for some.

- Techlife Unity: Provides free video tutorials and articles on various websites and applications. The site lacks focus on professional music production and the interface may be too complicated for seniors.
- Talleres de mayores de la Fundación La Caixa (Spain): La Caixa Foundation offers self-training courses on general computer skills for the elderly. Although they are exclusively online, they can be supported upon request. Registration is required. Fundación LaCaixa's workshops are free of charge and are among the best in terms of quality in Spain.
- Meganga (Global): Offers free computer training courses using video tutorials. While it covers a range of skills, the navigation can be problematic for seniors, and advertisements within the content may cause confusion.
- Sound Ninja (Bulgaria): Provides a comprehensive music production course in Bulgarian. However, the course is expensive (1350 euros) and may be financially inaccessible for many seniors.
- Aula.bg (Bulgaria): Offers self-paced video courses on popular software like Fruity Loops, Cubase, and Ableton. While well-structured, these courses are more suitable for intermediate to advanced users and are not beginner friendly.
- DJ Super Store (Romania): We have discovered this course which seems to offer training in the relevant area, however, this course does not seem specifically tailored to the needs of the senior musicians and they may need to

possess basic knowledge before they can benefit from such training. Additionally, the fee may create financial barriers for access.

- **Capacita TIC +55 (Spain):** Capacita TIC +55 offers both online and face-to-face training to people over 55 years old. The contents are very diverse, and it offers workshops throughout Spain. It also offers a test to measure one's digital skills and has a career guidance service. These courses are subsidized by the Spanish Government and effectively offer courses oriented to different levels of knowledge. With the employment orientation they include, they can be of help to musicians as well.
- **Dallesgo (Romania):** The company is offering a well-developed music production course, which can be bundled with a social media marketing course and personal branding course. These are all very relevant skills to the target group of our initiative. However, the courses are not specifically tailored to the needs of senior musicians, there is an access fee and, they are available in-person in Bucharest. These are all considered to form significant accessibility barriers for senior musicians.
- **Artlibitum Center:** Conducts Zoom courses on music production. The curriculum is complete, but it targets proficient computer users and costs 550 euros.
- **Aprendis (Romania):** The company is offering a variety of online digital skill courses and on their website, and although none of the courses are music production oriented, it is announced that there is a two-week long Digital skills course, which seems to be business-oriented, including word editors,

communication tools such as Zoom and Google suite tools. As such, the course content may be relevant to some of the skills musicians need to have in order to develop a career in the digital age. However, there is an access fee to this course, which may prevent some senior musicians from accessing it. Additionally, the course content is not suitable for beginners in computers and the internet.

- Ministry of Labor and Social Policy - Employment Agency (Bulgaria): The agency is regularly organising courses in the field of word processing. Whilst this course appears to be insufficiently thorough to satisfy the criteria for upskilling senior performers, the knowledge may be suitable for beginners. However, the accessibility to such learning opportunities is questionable, due to the lack of information on how prospective learners can sign up and benefit from this free-of-charge governmental learning programme. The information on the website is offered in Bulgarian, the English functionality is malfunctioning, which may affect the accessibility to such materials from immigrants living in Bulgaria.
- MA Studio (Romania): The studio is offering production courses in Romanian language. The curriculum seems to be comprehensive, however, basic computer knowledge is a requirement, and they do not seem to be specifically tailored to the needs of senior musicians. The access fee is also a barrier.
- RockSchool.bg (Bulgaria): Provides in-person music production courses. Although they offer free lessons for disadvantaged individuals, the focus is limited to Ableton, and the geographic location may pose an accessibility issue.

- Escuela Do Mayor (Spain): The music school Do Mayor has several projects for adults specially adapted to their needs and possibilities, both for amateurs and professionals. These are classroom courses in Madrid, so the accessibility to this opportunity, particularly for some seniors from other regions may be affected. The courses offered by this school are of a standard nature, but they do offer music production among their classes and insist on being equipped with the latest in computer technology.



## 12. Conclusion

The Erasmus+ funded project "Empowering Digital Transformations for Senior Musicians" project represents a strategic intervention aimed at bridging the digital divide for senior musicians. By providing tailored training programs and addressing specific barriers such as technical knowledge gaps, language, and financial constraints, this project will enable senior musicians to thrive in the digital age.

Investing in digital transformation training for senior musicians is crucial for enriching the cultural landscape and fostering diversity. Empowering these musicians with digital skills allows them to leverage their experience and expertise, aligning with evolving audience expectations and creating a more inclusive creative sector. The ripple effect of such empowerment extends far beyond individual musicians, engendering a culture of inclusivity and agility throughout the industry.

By democratising access to digital opportunities and nurturing talent across generations, the project envisions a future where senior musicians not only survive but thrive in the digital age, enriching our cultural tapestry for generations to come.

The intergenerational digital divide presents significant challenges for senior musicians, and its elimination would offer opportunities for enriching the music industry through diversity and collaboration. By addressing the technical knowledge gap, fostering intergenerational mentorship, and providing accessible, tailored resources, the "Empowering Digital Transformations for Senior Musicians" project can aid the bridging of this divide effectively.

Through comprehensive support and innovative approaches, senior musicians can successfully navigate the digital age, ensuring their valuable contributions continue to inspire and influence future generations. This project stands as a testament to the power of intergenerational collaboration and the importance of inclusivity in the digital transformation journey.

## 13. Future Steps

The analysis will serve as a foundation for developing targeted training programs for senior musicians. The comprehensive evaluation of existing resources, combined with the insights gathered from our extensive research, lays the groundwork for a series of well-structured, accessible, and effective educational initiatives.

The primary future step is to design and implement a series of training programs specifically tailored to the needs of senior musicians. These programs will be comprehensive, covering all the critical digital skills identified in our analysis. They will be designed to be user-friendly, considering the varying levels of computer literacy among senior musicians, and will aim to bridge the gap between their current skills and the requirements of the modern digital music industry.

To ensure the effectiveness of the training programs, we will organize a pilot training bootcamp. This bootcamp will serve as a trial run, allowing us to test the curriculum, gather feedback from participants, and make necessary adjustments before rolling out the full program.

- **Participant Selection:** We will carefully select a diverse group of senior musicians from different backgrounds and skill levels to participate in the pilot bootcamp. This will help us ensure that the training program is inclusive and meets the needs of a broad audience.
- **Hands-on Workshops:** The bootcamp will feature a combination of online resources and hands-on workshops, providing participants with practical, real-world experience. These workshops will be led by experienced instructors who can offer personalized guidance and support.

The long-term goal of the project is to establish a dedicated training center for senior musicians. This center will serve as a hub for ongoing education and support, providing senior musicians with the resources they need to thrive in the digital age.

- **Facility Setup:** We will identify a suitable location for the training center and equip it with the necessary technology and resources. The center will be designed to be accessible and welcoming, with facilities that cater to the specific needs of senior musicians.
- **Ongoing Support:** In addition to formal training programs, the center will offer ongoing support through workshops, mentorship programs, and online resources. This will ensure that senior musicians continue to develop their skills and stay up-to-date with the latest digital trends.

To maximize the reach and impact of our training programs, we will collaborate with cultural organisations and industry stakeholders. These partnerships will help us disseminate our educational materials and organise offline learning events.

- **Partnership Development:** We will identify and establish partnerships with cultural organisations, music schools, and industry associations. These partnerships will enable us to extend our training programs to a wider audience and create more opportunities for senior musicians.
- **Offline Learning Events:** In collaboration with our partners, we will organise offline learning events such as workshops, seminars, and conferences. These events will provide senior musicians with additional opportunities to learn, network, and share their experiences.

# Extended Insights

## Technical Knowledge Gap

The technical knowledge gap is a significant barrier for senior musicians, who often find themselves out of step with the tools and platforms that have become essential in the modern music industry. This gap is not merely about understanding new software or devices but also about effectively integrating these tools into their creative processes and professional workflows. Addressing this gap requires a multifaceted approach that encompasses various aspects of digital technology and its applications in music production, distribution, and promotion.

## Digital Production Tools

Many senior musicians are unfamiliar with digital audio workstations (DAWs) such as Ableton Live, Logic Pro, or FL Studio. These tools are fundamental for contemporary music production, allowing for recording, editing, and mixing music digitally. Proficiency in using DAWs can significantly enhance a musician's ability to produce high-quality recordings and experiment with new sounds and arrangements. The learning curve for these programs can be steep, requiring not only an understanding of the software interface but also a grasp of digital audio concepts, plugin management, and MIDI sequencing. Workshops and training sessions specifically designed for senior musicians can bridge this knowledge gap, enabling them to utilize these powerful tools effectively.

## Distribution Platforms

Understanding how to distribute music on digital platforms like Spotify, Apple Music, or Bandcamp is another area where senior musicians often lack expertise. This process involves more than just uploading tracks; it includes comprehensive knowledge about metadata management, royalties, and digital rights management (DRM). Metadata, which includes information such as song titles, artist names, and album art, is crucial for proper indexing and searchability on streaming platforms. Additionally, musicians need to navigate the complexities of royalties to ensure they are fairly compensated for their work. DRM knowledge is essential to protect intellectual property in the digital realm. Providing targeted educational resources and step-by-step guides can help senior musicians navigate these platforms and manage their digital releases more effectively.

Many senior musicians still struggle with distributing their music on digital platforms like Spotify, Apple Music, or Bandcamp. Our survey shows that only a small percentage of these musicians have successfully monetized their music online (93% strongly disagreed that they are successfully monetizing their music through streaming platforms, reflecting a widespread challenge). To fully benefit from these platforms, musicians need to understand metadata management, royalties, and digital rights management (DRM). Metadata, which includes details like song titles, artist names, and album covers, is essential for making music easily searchable on streaming services. Additionally, understanding how to handle royalties ensures musicians get fair compensation for their work. By learning about the digital supply chain and metadata standards, senior musicians can significantly improve their income from their music, including their older works. Many have extensive catalogues from before the digital age, and making this music available on streaming platforms would be advantageous for both the audience and the musicians. Providing educational resources and step-by-step guides can help senior musicians navigate these digital platforms and manage their music releases more effectively.

## **Social Media and Marketing**

Promoting music through social media channels such as Facebook, Instagram, and Twitter requires skills in content creation, audience engagement, and analytics. Many senior musicians are not familiar with these platforms or how to use them effectively for marketing purposes. Social media marketing involves creating engaging content that resonates with audiences, understanding platform algorithms, and utilizing analytics tools to measure engagement and adjust strategies accordingly. Effective use of social media can significantly boost a musician's visibility and reach, allowing them to connect with fans and grow their audience. Training programs focusing on social media strategies, content creation techniques, and data analysis can equip senior musicians with the necessary skills to leverage these platforms for their promotional efforts.

## **Integrating Digital Tools into Creative Processes**

Beyond mastering individual tools, senior musicians need to integrate digital technologies seamlessly into their creative workflows. This involves adopting a mindset that embraces continuous learning and experimentation with new digital tools. For instance, using DAWs in live performances, incorporating virtual instruments and effects, and collaborating with other artists remotely are aspects of the digital integration process. Encouraging a culture of digital experimentation and providing collaborative opportunities can help senior musicians feel more comfortable and confident in using digital tools creatively.

## **Addressing Specific Needs and Challenges**

The unique challenges faced by senior musicians must be acknowledged and addressed in any educational initiative. These challenges include varying levels of prior digital knowledge, differing learning paces, and potential physical or cognitive limitations. Tailored training programs that offer personalized instruction, practical hands-on experiences, and ongoing support can make a significant difference. Additionally, creating a supportive community where senior musicians can share experiences and solutions can foster a collaborative learning environment.

By comprehensively addressing the technical knowledge gap, we can empower senior musicians to fully participate in the digital music landscape. This not only enhances their creative potential but also ensures that their valuable contributions continue to enrich the music industry.

## **Demographic Insights and Digital Interaction**

The survey revealed a diverse demographic profile of musicians, with most respondents aged between 50-55, followed by a smaller group aged 60-65. This reflects a mature group of musicians, many with extensive experience in their field. The gender distribution was 28 males and 15 females, offering a varied perspective on the digital challenges within the music industry. A significant finding is the disparity in computer usage among respondents. While 8 participants use a computer daily, 6 reported rarely using one, highlighting a gap in digital interaction. This gap is more pronounced in Bulgaria and Romania, where computer usage is generally lower compared to Spain and Turkey. These differences

suggest that targeted digital skill programs might need to consider regional variations in access and familiarity with technology.

## **Knowledge Gaps in Digital Tools**

A substantial knowledge gap was observed regarding essential digital concepts. 30 respondents do not understand what metadata is, a critical component in cataloging music for online platforms. Metadata plays a crucial role in ensuring that music is discoverable on streaming services, yet many musicians lack the knowledge needed to optimize their content for visibility. Similarly, 37 respondents lack familiarity with Virtual Studio Technology (VST), a standard for audio plug-ins widely used in digital music production. The unfamiliarity with VST indicates that many musicians may not be using advanced digital production tools, potentially limiting the scope and quality of their recordings. This gap was particularly noticeable among respondents from Bulgaria and Romania, pointing to a need for targeted training programs in these regions.

## **Financial Barriers to Digital Transformation**

Financial constraints remain a significant challenge for many senior musicians. The cost of acquiring and maintaining digital tools and software often acts as a barrier to embracing new technologies. Survey responses revealed that many participants struggle with the affordability of software and digital production tools, which can prevent them from fully integrating these technologies into their creative process. This is reflected in the low rate of monetization through digital channels; 40 respondents reported that they have not been able to successfully monetize their music through streaming platforms.



The challenge of monetization is further compounded by the 31 respondents who find it difficult to upload their music online. The technical barriers associated with using digital distribution platforms can limit musicians' ability to reach new audiences, especially when paired with a lack of familiarity with metadata and digital marketing techniques.

## Reluctance to Adopt New Technologies

A notable trend in the survey data is the reluctance among many respondents to embrace new technologies. 29 respondents expressed disinterest in using new technologies for music distribution, while 27 showed a lack of interest in digital production tools. This reluctance could be attributed to the complexity of digital platforms, a preference for traditional methods, or a lack of confidence in their ability to adapt. Addressing these psychological barriers will be as important as providing technical training to help senior musicians transition into the digital age.

According to a report from the Pew Research Center, one major reason seniors may be reluctant to use new technology is the fear of making mistakes that could lead to negative consequences.<sup>11</sup> Additionally, a study published by the International Journal of Environmental Research and Public Health highlights that seniors often perceive new technology as being too complicated and not user-friendly, deterring them from attempting to learn it.<sup>12</sup>

Another factor is the lack of perceived usefulness. Seniors may not see the relevance of new technology in their daily lives, especially if they have managed well without it

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<sup>11</sup> Pew Research Center. "Older Adults and Technology Use." Retrieved from <https://www.pewresearch.org/internet/2014/04/03/older-adults-and-technology-use/>

<sup>12</sup> International Journal of Environmental Research and Public Health. "Barriers to Digital Inclusion of Older Adults: Insights from a Participatory Action Research Study." Retrieved from [https://www.researchgate.net/publication/371178730\\_Barriers\\_to\\_Digital\\_Inclusion\\_among\\_Older\\_People\\_a\\_Intergenerational\\_Reflection\\_on\\_the\\_Need\\_to\\_Develop\\_Digital\\_Competerences\\_for\\_the\\_Group\\_with\\_the\\_Highest\\_Level\\_of\\_Digital\\_Exclusion](https://www.researchgate.net/publication/371178730_Barriers_to_Digital_Inclusion_among_Older_People_a_Intergenerational_Reflection_on_the_Need_to_Develop_Digital_Competerences_for_the_Group_with_the_Highest_Level_of_Digital_Exclusion)

so far.<sup>13</sup> A research paper from the Journal of Medical Internet Research indicates that seniors who perceive technology as irrelevant to their needs are less likely to adopt it.<sup>14</sup>

Addressing these psychological barriers will be as important as providing technical training to help senior musicians transition into the digital age. Through tailored educational programs, we can better support senior musicians in overcoming these obstacles and embracing new technologies with confidence and ease.

## Tailored Training Programs for Senior Musicians

The survey results emphasize the need for targeted digital skills training programs that cater to the specific needs of senior musicians. With 25 respondents actively attempting to improve their digital skills but 18 struggling to find suitable learning materials, there is a clear demand for accessible and relevant training resources. Training programs should be designed with a focus on simplicity and relevance, offering step-by-step guidance in local languages where possible. Courses on understanding metadata, using VSTs, and mastering digital recording software could significantly enhance musicians' ability to create and distribute their music online. Additionally, creating communities of practice where more tech-savvy musicians mentor others could help bridge the skills gap.

The survey results highlight both the challenges and opportunities that senior musicians face in adapting to digital transformation. While many have made efforts to improve their digital skills, the overall findings point to significant barriers in terms of digital literacy, access to resources, and financial constraints.

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<sup>13</sup> Journal of Medical Internet Research. "Understanding Technology Adoption among Older Adults: A Qualitative Study." Retrieved from <https://www.jmir.org/2017/11/e374/>

<sup>14</sup> Journal of Medical Internet Research. "User Perspectives on Technology Use Among Older Adults: A Systematic Review." Retrieved from <https://www.jmir.org/2019/2/e11694/>

- 51.2% of respondents do not use computers for music production, indicating a critical gap in integrating digital tools into their creative workflow. This suggests that many musicians may be missing out on the potential benefits that digital tools offer, such as higher production quality and easier collaboration.

- 40 respondents struggle with monetizing their music through streaming platforms, which highlights a need for strategic guidance on how to earn revenue in a digital music economy. This could include training on how to use metadata effectively and leverage social media for promotion.

- The reluctance to adopt new digital distribution methods, expressed by 29 respondents, underscores the importance of making new technologies approachable and relevant to musicians' existing workflows. Overcoming this reluctance will require not just technical training but also showing the tangible benefits that digital platforms can offer, such as reaching new audiences and increasing revenue streams.

Addressing these challenges through tailored educational programs could enable senior musicians to become more self-sufficient and competitive in the digital age. By providing the right tools, training, and support, the music industry can help these experienced artists adapt to new digital environments without losing the richness and authenticity of their musical traditions.

The path forward lies in creating a supportive environment where senior musicians can seamlessly integrate digital tools into their existing practices. Programs focusing on basic digital literacy, understanding the digital supply chain for music distribution, using digital tools for music production, and establishing effective online marketing strategies are essential to help bridge the gap between traditional musicianship and modern digital demands. The survey findings clearly show a readiness among some musicians to embrace digital transformation, but more must be done to ensure that all can benefit from the opportunities the digital world has to offer. Beyond the lack of digital skills, senior musicians also confront psychological barriers and technophobia,

which can be overcome through the facilitation of collaboration between young and senior generations. Mentorship courses and practical one-on-one initial training can play crucial roles, helping senior musicians gain confidence and become motivated to facilitate further learning. This approach not only addresses technical skills gaps but also fosters a community of mutual support, enhancing both confidence and competence in the digital sphere.

# Analysis of the Current Learning Perspectives Assisting the Digital Transformation of Senior Musicians

Empowering Digital Transformations for Senior Musicians (2023-1-BG01-KA210-ADU-000152921)

## Annex I

### Concrete Steps: Recommendations to Bridge the Intergenerational Divide

#### 1. Tailored Education Programs

**Develop educational programs specifically tailored to the needs and learning styles of senior musicians.** It is essential that these programs should be accessible free-of-charge and begin with basic digital literacy and gradually introduce more complex tools and concepts. Incorporate a hands-on approach, allowing senior musicians to practise using digital tools in a supportive environment. By creating an inclusive and gradual learning curve, these programs can effectively enhance the digital competencies of senior musicians.

#### 2. Community Initiatives

**Launch community initiatives that promote intergenerational collaboration.** Music schools, community centers, and cultural organizations can host workshops and

events that bring together musicians of different ages. Encouraging local governments and cultural institutions to fund and support these initiatives ensures they are accessible to all. These collaborative efforts can foster a sense of community and mutual learning, bridging the generational gap in the music industry. Additionally, lobbying efforts in front of central and local governments by organizations such as NGOs, Collective Management Organizations for Copyright, and Syndicates representing such professionals are crucial for addressing the issues of digital exclusion faced by senior musicians. Advocating for more free-of-charge, accessible education for digital upskilling can significantly enhance these efforts. While good examples exist in Spain and Turkey, where local government structures such as municipalities actively support such initiatives, there is a noticeable lack of such proactive involvement in Bulgaria and Romania. By adopting successful models from Spain and Turkey, and intensifying lobbying efforts, there is a substantial opportunity to replicate these successes in regions where such support is currently inadequate.

### 3. Online Platforms and Resources

**Create online platforms that cater specifically to senior musicians.** These platforms should offer user-friendly interfaces, comprehensive tutorials, and resources in multiple languages. Developing content that addresses the unique challenges faced by senior musicians, such as tutorials on using social media for music promotion, understanding metadata, and navigating digital distribution platforms, can provide valuable support. Ensuring these resources are easily accessible online can significantly enhance the digital literacy of senior musicians.

## 4. Financial Support

**Provide financial support for senior musicians to access digital tools and training programs.** Scholarships, grants, and subsidies can help offset the costs of equipment and courses. Partnering with technology companies and music industry stakeholders to offer discounted or free access to software and hardware for senior musicians can further alleviate financial barriers. These measures can make digital upskilling more attainable for senior musicians.

## 5. Anti-Ageism Memorandum

**An anti-ageism memorandum should be developed and adopted by relevant organisations and official governmental bodies.** This memorandum will commit entities to actively combat ageism by fostering an inclusive environment where senior musicians are valued and supported in their digital learning and creative endeavours. This includes adopting policies that promote equal opportunities, providing age-appropriate resources, and encouraging positive attitudes towards older musicians.

By implementing these recommendations, we can bridge the intergenerational divide and ensure that senior musicians have the support and resources they need to thrive in the digital age.

## 6. Mentorship Programs

**Establish mentorship programs that pair senior musicians with younger counterparts.** These programs should focus on skill exchange, with younger musicians providing digital training and senior musicians offering musical mentorship. Promoting long-term mentorship relationships that go beyond one-time workshops fosters ongoing support and collaboration. This intergenerational mentorship can create a dynamic and supportive learning environment for both senior and junior musicians.

## 7. Accessibility Enhancements

**Ensure that all educational materials and platforms are designed with accessibility in mind.** This includes considerations for visual, auditory, and cognitive impairments. Offering materials in multiple formats, such as video tutorials with subtitles, audio guides, and written manuals, can accommodate different learning preferences. By making educational resources accessible, we can ensure that senior musicians with various needs can fully engage with digital learning opportunities.