



Co-funded by the  
Erasmus+ Programme  
of the European Union

## KEY STRATEGIES AND CONTENTS ON DIGITAL SKILLS FOR HYBRIDIZATION OF JOBS IN THE ARTS, CULTURE AND ENTERTAINMENT SECTOR

Findings at European level



**Sinziana Preda and Ciprian Panzaru**

West University of Timisoara

22 April 2022



Co-funded by the  
Erasmus+ Programme  
of the European Union

## Contents

EXECUTIVE SUMMARY.....	3
INTRODUCTION .....	4
Digital skills demanded in the Arts, Culture and Entertainment .....	5
From the point of view of employers .....	5
From the point of view of users .....	6
Digital skills of workers in the sector and use of digital tools in the workplace .....	6
New digital tools introduced in the sector (due to COVID-19) and their impact and associated training	7
Current existing gap of digital skills in the sector.....	8
Barriers to digitalisation of the Arts, Culture and Entertainment Sector .....	9
Potential for digitalisation and opportunities on digital skills .....	10
Desirable digital skills for Arts, Culture and Entertainment workers.....	11
Training provision for digital skills in Arts, Culture and Entertainment Sector.....	11
RECOMMENDATIONS.....	13
REFERENCES.....	14



Co-funded by the  
Erasmus+ Programme  
of the European Union

## EXECUTIVE SUMMARY

In the Arts, Culture and Entertainment Sector, digitalisation brought many opportunities both for providers and beneficiaries. In some sub-sectors, digital technologies became essential. The desk research, survey and workshops conducted into ACSOL project revealed that Covid-19 pandemic has accelerated digitalisation of the sector and therefore the need of digital skills for the workers in the area of arts, culture and entertainment.

This report explores the key strategies and contents on digital skills for hybridization of jobs in the social care sector. It is based on the results of workshops conducted with triple helix stakeholder in the Arts, Culture and Entertainment Sector in Spain, Germany, and United Kingdom. The aims of the workshops were to find out the digital skills demanded, identify barriers to digitalisation, analyse the potential for digitalisation and opportunities on digital skills, desirable digital skills for social care workers, and assess the training provision for digital skills in order to make recommendations in the eLearning strategies in the in the Arts, Culture and Entertainment Sector. The main directions of this research were set up at the Annual Conference of ENRLMM in 2021 during the workshop “New Digital Skills Needs in the in the Arts, Culture and Entertainment Sector”.

The results show that **digital skills demanded in the in the Arts, Culture and Entertainment Sector** are very diversified and different at sub-sector level. Digital skills demanded cover a large area, from basic skills (use a computer, use digital device operating systems, social media management, office software - Microsoft Office communication tools - Teams and Zoom, use creative suite software, plan digital marketing) to intermediate or advanced digital skills (knowledge of Adobe Photoshop, WordPress, or even coding). From the point of view of users there was not identified a demand of particular digital skills, but they do expect some products to be delivered digitally (music, movies etc.).

Covid-19 pandemic accelerated the **use of digital tools in the in the Arts, Culture and Entertainment Sector** and an intensification of the consumption and production of digital cultural was revealed during this period.

**The level of digital skills** is different from country to country but also among sub-sectors. Regional economic differences and socio-demographic specificities still have a strong impact on the level of digital skills. Moreover, the specificities of some sub-sectors imply an advanced level of digital skills among the workers (e.g., animation sub-sector)

Financing, lack of digitalisation strategy and lack of people with hard ICT skills with the experience represent the **main barriers to digitalization**.

There is a good **potential for digitalisation and opportunities on digital skills** in some sub-sectors (e.g., animation, screen industry) but for some areas (e.g., performing arts) the potential for digitalization is very low.



Co-funded by the  
Erasmus+ Programme  
of the European Union

## INTRODUCTION

In the last two decades digitalisation profoundly affected all economical sectors. The Arts, Culture and Entertainment Sector was not excepted from this impact. Even though most of the activities within this sector are based on face-to-face interaction, digitalisation brought more opportunities both for providers and beneficiaries. Moreover, due to the high variety of sub-sectors, some digital technologies such as augmented/virtual reality or 3D graphics, became essential. In this context, the Arts, Culture and Entertainment Sector workers must improve their digital skills to be able to deliver qualitative services and match with the expectation of the beneficiaries.

The improving of digital skills is one of the priorities for the European Commission. Since 2006, digital competence has been considered one of the eight key competences for lifelong learning for all European citizens (European Commission, 2006).

This report explores the key strategies and contents on digital skills for hybridization of jobs in the Arts, Culture and Entertainment Sector. It was developed within ACSOL project. ACSOL project aims to help low-skilled workers to train themselves in essential digital skills in order for them to gain access to further digital training and to be better prepared in their job. The ACSOL project looks to expand adult digital skills training provision through online learning which would have significant advantages for workers in Arts, Culture and Entertainment Sector.

This research, based on the results of workshops conducted with triple helix stakeholder from Arts, Culture and Entertainment Sector in Spain, Germany, and United Kingdom complement the study conducted in the previous stage of the ACSOL project based on a survey. The survey showed that the most used digital skills needed to perform the organisation's daily operations are basic digital skills such as send/receive e-mails, input information on the PC, and use the search engines to find information. The workshops developed with Triple Helix Groups established within ACSOL project allowed exploring more in depth the digital skills demanded into the Arts, Culture and Entertainment Sector with a particular focus on digital skills demanded, barriers to digitalisation, the potential for digitalisation and opportunities on digital skills, desirable digital skills, and the training provision for digital skills.

The results are presented individually, for every country analysed. The last part contains some recommendation for supporting the development the development of digital skills in Arts, Culture and Entertainment Sector.



Co-funded by the  
Erasmus+ Programme  
of the European Union

## Digital skills demanded in the Arts, Culture and Entertainment

Demand for digital skills in the Arts, Culture and Entertainment Sector was analysed both, from the point of view of employers and users. Additionally, the used of digital tools and new digital tools introduced in the sector due to the Covid-19 pandemic was also explored. Finally, the current existing gap of digital skills in the Arts, Culture and Entertainment Sector was assessed.

Discussion with the representatives of Triple Helix Groups revealed a wide spectrum of types and level of digital skills demanded but a general opinion was that Covid-19 pandemic accelerated the use of digital technologies. Moreover, even though the pandemic situation from the beginning of 2022 allowed resuming of the most face-to-face activities, the digital technologies adopted previously continued to be used.

### From the point of view of employers

Triple Helix groups from all countries involved in the study identified different needs and level of digital skills for workers in Arts, Culture and Entertainment Sector.

In Spain, according to the online job vacancies posted in 2019 and 2020, the companies in the sector looked for candidates with digital skills such as the use of Microsoft Office software, use a computer, use digital device operating systems, knowledge of Adobe Photoshop and WordPress, social media management, use creative suite software, plan digital marketing.

Also, in Germany, the digital skills identified were related to the ability to search for information on the Internet, to write emails, use Office tools, snipping tools, Microsoft Teams, Zoom for communication, tools to send large amounts of data (e.g. WeTransfer, Nextcloud), visualisation tools (Miro), ability to use tutorials to further education independently, Overso (with Overso, the German Choral Association provides its member organisations with software that has been specially developed for the needs of choral societies and associations), use software to digitally process grant applications; in the museum context (ability to create videos; design guided tours online).

In United Kingdom, the impact of pandemic revealed a demand for digital skills for development of online presentations, sharing presentations and screens, using Teams and Zoom (or others), using social media to push the services of the employer or their own work. A so call “Create-Tech” is the major need. The study identified a consistent need for people who are seeking careers being creative but have hard-level ICT skills - such as coding and digital technology. In the animation sector, the industry needs a high percent of staff within their crews to be UK based – or they risk not receiving the tax relief. In the Screen Sector the employers are more likely to highlight softer skills around management and leadership. From the animation section, there is a need to attract people from computer science etc.



Co-funded by the  
Erasmus+ Programme  
of the European Union

## From the point of view of users

Taking into account the characteristics of the sector, a wide diversity of subsectors and a very heterogeneous public, the demand of digital skills from the user's point of view was difficult to assess.

For example, the Spanish users are not demanding particular digital skills, but they do expect some products to be delivered digitally. Examples include music/video in streaming, virtual performances (concerts, theatre, dance, shows), virtual museum visits, virtual touristic visits, online gaming, e-books, online press, contents delivered through social media (especially Instagram and Twitch).

A similar asymmetry was found in United Kingdom. There is a perceived lag between the skills of the audience and the skills of the sector. The users want to access in lots of new ways - but employers just don't know what they could offer and how. Audiences want new types of engagement with the arts and cultural experiences. Some performers can use Zoom or other routes to reach an audience, but this is very tough for museums and galleries and other more 'static' offers – which actually are at the heart of a regional or city cultural ecosystem. Organisations do not know how to change the way they work to make the most of this. But there is a huge market and audience (An example of a development in this field is at the University of Exeter with the Hidden Histories App for use in Venice). In the Screen Sector there is a major boom in jobs due to the multiplication of Streaming Services. Users valuing the high levels of production achievable now through the application of Tech skills in making the film and Tv materials. Challenges for the sector as non-professionals (influencers) can find their way into the sector in non-conventional ways.

## Digital skills of workers in the sector and use of digital tools in the workplace

A report published by European Commission in 2017 (European Commission, 2017) found out that "the digital technologies are widely used in all types of jobs, also in economic sectors not traditionally related to digitization. Even though the mentioned report has not explored digitalisation in the Arts, Culture and Entertainment Sector, other documents or pieces of research revealed the importance of digital skills in creative industries (OECD, 2020; European Commission, 2020; UK Parliament, 2022).

The research conducted within ACSOL project brought more evidence related to the digital skills of workers in the Arts, Culture and Entertainment Sector and use of digital tools in the workplace

For example, in Spain, a high number of workers in the sector are using digital tools for management purposes (35%), which is significantly more than in the rest of the countries. Also, it is noteworthy that almost 10% of the Spanish respondents answered that they do not use digital technologies at all. Only 12,6% of workers are using digital technologies to create new content, while in other countries this rate is nearly doubled.



Co-funded by the  
Erasmus+ Programme  
of the European Union

In United Kingdom, there is an enormous list of digital skills – and an enormous amount of industry specific software etc. that needs to be used. Digital skills vary hugely from areas such as acting and performing where digital skills and digital literacy are really very high and performers have support with social media profiles and promotion on a regular basis to areas of the sector where skills can be quite low (some museum volunteers and small enterprises for example) – where they are not able to move their business-model to embrace new audiences.

New digital tools introduced in the sector (due to COVID-19) and their impact and associated training

The Organisation for Economic Co-operation and Development (OECD) has identified arts, culture and entertainment as one of the sectors most at risk due to the impact of the COVID-19 crisis and the containment measures (OECD, 2020). In this context, digitalisation and adoption of digital technologies has been seen as a key factor that allowed Arts, Culture and Entertainment Sector to remain active during pandemic restrictions.

In Spain, during COVID-19 it was noticed an intensification of the consumption and production of digital cultural content, mainly as a result of the impossibility of congregating and occupying physical cultural spaces during the pandemic. There was an explosion of video streaming, concerts, museum visits, art sharing, social networks. A lot was done; many products were offered for free. The sector agrees that the Covid-19 pandemic had an impact on the use of digital tools and/or technologies and many companies have received training in Microsoft Office(Word, Excel, PowerPoint), Google apps; video call, streaming and organization of mixed events; social media, digital marketing, positioning in networks; Agile model, SCRUM model; web development and website optimization; Photoshop, color/ editing/ production/ script; narrative, metrics, 3D infographics, cybersecurity; electronic commerce, administration, invoicing, and contracting; accounting tools. After the restrictions were lifted, users were eager to go back to regular theatres/ performances.

In Germany, several new tools can be mentioned, like virtual communication tools (e.g. Zoom) and social media for sharing videos (Museum). Social media was used to present theatre and concert performances - proved to be a boost to professionalism (One participant from a theatre notes that there have been almost no lasting changes in the area of digitalisation. After the theatres were allowed to reopen, the working methods were more or less the same as before the pandemic. The digital formats developed during the pandemic are not actually being continued now.) Other tools mentioned refer to the opening of a YouTube channel; implementation of a Cloud system; state-supported funding for the development of digitally supported cultural communication (technical equipment); example of a theatre creating the position of a person responsible for digitalisation issues and establish a department that implements digital projects and performances.



Co-funded by the  
Erasmus+ Programme  
of the European Union

In United Kingdom, lots of need to understand digital and new ways of working due to the rapidly evolving sector (streaming etc.) However, not many new tools were indicated by the participants in working groups. Instead, were indicated some campaigns related to use of digital technologies. For example, Equity (trade union for creative workers in the UK entertainment industry) run campaigns around Artificial intelligence (Equity, 2022; BBC, 2022; Variety, 2022). Screen Skills identify and provide lots of eLearning resources on their website. Helping new entrants and other broad cross-industry modules on how to enter the sector. Plus, a freelance toolkit. They find the pigeonholing of arts, away from Tech skills, as unhelpful in most education providers.

### Current existing gap of digital skills in the sector

Digital skills play an important role in improving the efficiency, accessibility, and quality of the social care at the European level. Therefore, the digital skills should be ensured in all countries. The European Union assumed the role in closing the skills-gap providing a substantial budget for digitalization within recovery and resilience program.

It is a welcome step as ACSOL project pointed out the existing gap of digital skills within the Arts, Culture and Entertainment Sector. Regional economic differences and socio-demographic specificities still have a strong impact on the level of digital skills.

Spanish workers in the sector are not low-skilled and the sector appears to be equipped with the digital skills for management, marketing, social networks etc. However, the sector needs digital skills for the creation of new products and services based on new technologies. It is about being innovative in the contents that we offer, opportunities for the sector around metaverse, artificial intelligence, virtual reality etc. However, the sector needs a digital transformation, especially some subfields. People in the sector in general do not have a digital mindset. There is a necessity to think/to design the projects from a digital point of view. As for instance when workers list their skills gaps, they identify the basic ones, because they are not aware of the technologies that could transform their products and services.

In Germany, older employees in particular do not have sometimes basic digital skills (e.g., understanding what function newsletters can have for strategic public relations work). Often the infrastructural conditions for the use of digital tools do not exist (slow internet; restrictions in the choice of tools by the employer; no financial resources).

In United Kingdom, an important issue is intellectual property rights – and performers' rights to their own materials especially when AI comes in. They need to understand they need to protect rights around voice and image. The industry moves so fast and one of the problems mentioned by participants was how can people protect their materials and stay on-top of digital development? Within the Screen sub-sector, the major gaps are in Create-Tech. Finding people who wish to work in the arts and to be creative but also come with the ICT skills needed. The individuals most impacted by the skills gaps are the art department



and their design team who have a very different approach to the later stage tech workers. They need to collaborate more. Maybe the actors and director/producers who are in need of re-training. Perhaps also if they target arts more generally as well as outside sector. Some people during the pandemic did develop new tech skills as they couldn't use their existing ones.

## Barriers to digitalisation of the Arts, Culture and Entertainment Sector

Even though the digitalisation is universally considered a key factor that could improve the quality of services provided in any sector, including Arts, Culture and Entertainment Sector, a lot of barriers still exist.

In Spain the Arts, Culture and Entertainment sector is vast and diverse. In Spain, the research focused on the cultural and creative industries, which are still very wide because they group together 6 cultural subfields (performing arts, visual arts, audiovisual, publishing and print media, music and cultural heritage) and 9 creative subsectors (architecture, crafts, digital content, design, gastronomy, language industries, fashion, advertising and marketing, and video games). The nature of these subsectors is as different as the needs to be addressed to attain a digital transformation. For example, the digital skills necessary for video gaming or audiovisual activities have nothing to do with the ones needed for performing arts. Moreover, the digitalization of the performance could go against its very nature, that is the face-to-face experience. The performing arts area is concerned about technology cutting down jobs. Generally, the sector is very conservative and has a traditional mindset. It has been noted a lack of motivation to explore new opportunities and a protectionism against the digital. Challenges depend related to the workers age and to the subsector particularities. There is a resistance to change but, as the representative of the book industry explains, once, the book industry was very concerned about the e-books but both traditional books and e-books are coexisting, and the market is still profitable. We must not be afraid of new technologies, we need to adapt to the new digital demands, resistance to change only harms the sector. Other barriers refer to some subsectors facing precariousness, so many workers need more than one job to make a living. The lack of time is perceived as one of the biggest barriers to acquiring new skills. There are high rates of instability and work-life balance is very difficult in the sector.

In Germany, the analyse of barriers to digitalisation was split on some very specific directions. For example, in the case of museums the participants mentioned the lack of a real digitisation strategy; instead, they mentioned the existence of a selective approach. Overall, there is rather a lack of time for specific further training in the field of digitisation; also, few offers by the employer for the development of digital skills; If new tools are introduced by the employer, employees are usually not specially trained for them. Individual readiness for further training or the acquisition of new digital tools is strongly dependent on the recognition of a benefit for one's own work; this benefit must be communicated. Infrastructural requirements (internet, technical equipment) were mentioned as an important barrier. A



good infrastructure is absolutely necessary so that the target groups have access to culture-based services. Hardly involvement of employees (e.g., introduction of cloud telephony) was another factor that affect digitalisation. Employees must be involved and be prepared so that acceptance and benefits can be achieved. Individual training measures are needed but they only work if there is also the corresponding digital ecosystem in the organisation.

In United Kingdom, in terms of barriers, organisations are looking at their core money (often public funding) and how they can access this. They often forget to include finance for self-development and skills. Digital now needs to be a key theme in all of this bidding and aimed at helping the sector to develop and innovate. Getting time off for training and learning is very difficult and a major barrier. The clubs and variety acts tend to be the members who have fewer digital skills, but that industry is still quite old fashioned and they are coping reasonably well. In the Screen sub-Sector the main barrier is simply a lack of people with hard ICT skills with the experience they need.

## Potential for digitalisation and opportunities on digital skills

Qualitative research conducted within ACSOL project identified different levels and potential for digitalisation and opportunities on digital skills in the Arts, Culture and Entertainment Sector.

In Spain, some subsectors are more digitalized than others. Performing arts, for example, have fewer opportunities to digitalise than other subsectors that are digital in essence. The sector is home to many self-employed workers who must do everything in their business: create, manage, sell. People usually focus on what they like more (creating). These self-employed might need help in carrying out the tasks that have less to do with their products/ services. Sometimes management/ accountability is externalized. Management tasks have a great potential for digitalisation, especially because these are general and serve all subfields of the sector. Communication tasks, both internal and external, also have potential for digitalisation, the same as collaboration with other agents in the field. Activities related to the creation of products and services and performances have less potential for digitalisation, but it appears that it is here that sector needs more help. These tasks and functions are related to the subsector-specific requirements. Some examples include production of digital cultural content; video streaming; virtualisation of performances, visits, tours, guides etc.; online dissemination of the creative works; reaching new markets and audiences; digitalisation of work arts and heritage; gamification; sharing culture through social networks; crowdfunding to raise funds; personalised experiences for the audience/ client; new ways of designing and developing crafts; 360º life concerts and shows.

In Germany, it is estimated that in the future communication will probably take place internally and with partners and customers via video conferencing system. In this context were mentioned Overso (software for choral societies and associations), but further training of staff is needed so that the software can be used for more activities and processes. Also, digitalization brings more possibilities for addressing new



Co-funded by the  
Erasmus+ Programme  
of the European Union

target groups (social media communication, example digital extension of musical or theatrical performances).

In United Kingdom, this is a difficult issue for such a massive sector. Some areas of performance will have almost no potential for digitalisation – other than the wrap-around skills such as promotion and management of profile. Other areas such as screen skills have a massive need for very tech-literate computer programmers and designers, animators etc. Digitalisation is impacting on all of the sector and an ongoing boom is making recruitment very difficult. Attracting suitably tech-literate people from other areas would be beneficial. In the museums and art gallery sector there is a real need for a more IT-literate workforce to help them to make better use of the very considerable resources that they have available.

Performers do have a pressing need to help them understand their own IP – based on their voice and performance and how this will be impacted by artificial intelligence.

## Desirable digital skills for Arts, Culture and Entertainment workers

An OECD report (2020) shows that the Arts, Culture and Entertainment Sector has innovated rapidly, notably with accelerated digitalisation. This process led to an emergence of more digital skills among the workers of the sector.

In Spain, the digital skills for Arts, Culture and Entertainment workers highlighted by participants were streaming platforms, social networks, auto edition techniques, photo and video editing, 3D printing, immersive technologies, virtual reality, augmented reality, interactive tools, avatars, crypt art, metaverse, crowdfunding techniques, blockchain.

In United Kingdom, an enormous list can be unfolded as it varies between sub-sectors, but some of digital skills strongly needed, as they were identified during workshops, are sector specific software skills; the ability to advocate for their own work (as so many are freelancers); understanding of the impact of Artificial Intelligence on the sector and their own IP; understanding of how to digitise museum and art gallery collections to take the art to the public; some basic digital skills needs in volunteers and others in less well-paid roles in the sector.

## Training provision for digital skills in Arts, Culture and Entertainment Sector

The COVID-19 pandemic showed the enormous role of the digital skills for Arts, Culture and Entertainment Sector. Therefore, the access to continuous professional training is one of the most important factors that allow the workforce to get necessary skills for their job. An OECD study conducted in 2020 (OECD, 2020)



Co-funded by the  
Erasmus+ Programme  
of the European Union

highlighted the importance of digitalisation and digital skills in the sector but to make this process sustainable over time there is necessary to address the digital skills shortages within the sector.

The ACSOL project support this initiative aiming to expand adult digital skills training provision through online learning with a particular focus on workers in Arts, Culture and Entertainment Sector. Workshops conducted within national triple helix set up by each partner involved in ACSOL project found out that, at the national level, the situation concerning the training provision for digital skill in Arts, Culture and Entertainment Sector is different, but a lot of improvement is needed.

The Spanish sector perceives that there is enough training available for management activities. There even is training available around the different technologies that could be used for the service and product development. It is not about individual capacities, technically they are up to date. Workers in this sector are in general self-taught. They are used to watching internet tutorials to learn how to do things. But it appears necessary a cultural transformation to go digital, an organizational transformation, different ways of thinking about things. The Basque District of Culture and Creativity (BDCC) offers free training on management tools and open sessions on specific topics that have been identified as a need by the sector (market growth, intellectual property, networking). They also share practical experiences, case studies of implementation and knowledge by different experts. Regarding the skills related to the product and service development, the BDCC has also published a Technological Guide for the Cultural and Creative Industries to guide the sector in their digital transformation. The Guide identifies 33 technologies of the digital world or concepts of application that could be used by the sector and practical examples are provided. Business associations help a lot and offer training around management skills, but they only cover general needs and provide general advice.

In Germany the situation and existing possibilities of further education on digital competences in the organisation/region usually covers individual offers of the adult education centres, internet offers, organising training on social media, offers (virtual, hybrid) via associations (e.g. German Museum Association, Association of German Museum Educators). Working groups in the various theatre associations try to organise training for members (e.g., urban network of cultural workers; organise training for members, also for digital contexts).

In United Kingdom, some areas – such as Screen Skills already have a lot of materials to support them. Others such as actors and performers have e-learning materials that are often more targeted towards soft skills and social media skills. All are well-used. There seems to be a lack of training for those in parts of the sector where attendance numbers are still low, but much could be achieved through digitalisation (art galleries and museums).



## RECOMMENDATIONS

Covid-19 pandemic has highlighted the importance of technology for the continuation of the activity in the context of measures that imposed physical and social distance. In particular, in the fields like social care or entertainment, arts and culture where the communication and face-to-face contact is important, the continuation of activity required a lot of creativity but also improvisation.

Research activity employed within ACSOL project was critical to understand this context. On the one hand it revealed the specificities of the situation and how services were provided in some European countries, and on the other hand allowed identifying the possible ways to develop further and improve digital skills, and support digitalisation in the sector.

Some key points were identified, and they are summarised below:

- The future training courses should be customised at sub-sector level due to diversified and multiple digital skills required. For this, the following aspect should be considered:
  - Granulation at sub-sector level to map specific digital skills;
  - Identifying new jobs and occupations that are being created in the sector/sub-sectors;
  - Identifying new market niches and needs (for example through surveying the labour market and analyse the job vacancies);
  - Analyse the future challenges of the sector.
- Few general directions for training courses, available for all sub-sectors could be:
  - Explaining the opportunities and possibilities that the new technologies could bring to the sector; raise awareness about certain technologies and trends that are more useful in the sector, e.g., virtual and augmented reality, crypto-art, blockchain, metaverse, artificial intelligence;
  - Exemplifying with good practices in the sector related to how to create a web presence, social media use for contents, shift to virtual performance, use of YouTube channels, podcasts, how to price the product/ services offered online etc.
- The training courses should target also the volunteers and freelancers in the sector (there are many volunteers in the sector – some of them are older workers and recent leavers form the labour market with low level of digital skills – in this case the focus should be on basic digital skills);



Co-funded by the  
Erasmus+ Programme  
of the European Union

## REFERENCES

BBC (2022). campaign against AI 'show stealers'. Available online at: <https://www.bbc.co.uk/news/technology-61166272>

Curtarelli, M., Gualtieri, V., Jannati, M. S., & Donlevy, V. (2017). ICT for work: Digital skills in the workplace (final report). European Commission, Directorate-General for the Information Society and Media. Available online at: <https://data.europa.eu/doi/10.2759/498467>

Equity (2022). campaign to strengthen performer's rights in response to the rapid development of artificial intelligence across the entertainment industry. Available online at: <https://www.equity.org.uk/news/2022/april/4-out-of-5-performers-don-t-understand-their-rights-when-working-with-ai/>

European Commission (2020). Consultation on opportunities offered by digital technologies for the culture heritage sector. Available online at: <https://digital-strategy.ec.europa.eu/en/consultations/public-consultation-opportunities-offered-digital-technologies-culture-heritage-sector>

Organisation for Economic Co-operation and Development. (2020). Culture shock: COVID-19 and the cultural and creative sectors. OECD Publishing. Available online at: <https://www.oecd.org/coronavirus/policy-responses/culture-shock-COVIDCOVID-19-and-the-cultural-and-creativesectors-08da9e0e/>

United Kingdom Parliament (2022). The impact of digital technology on arts and culture in the UK. Postnote 662/2022. Available online at: <https://researchbriefings.files.parliament.uk/documents/POST-PN-0669/POST-PN-0669.pdf>

Variety.com (2022). Artificial Intelligence is Infringing on Actors' Image. Available online at: <https://variety.com/2022/biz/news/artificial-intelligence-actors-rights-equity-1235236945/>