Review Paper

The Creative Employment in the Context of Structural Transformations

Nataliya Kuznetsova^{1*}, Olha Borysenko², Olena Ivashchenko³, Viktoriia Podhaietska⁴ and Ihor Baida⁵

¹Department of Economic, Entrepreneurship and Marketing, Cherkasy State Business College, Cherkasy, Ukraine ²Department of Graphic Design and Book-Art, Faculty of Publishing-Printing and Informational Technologies, Ukrainian Academy of Printing, Lviv, Ukraine

³Department of Information Technology, Kyiv National University of Culture and Arts, Kyiv, Ukraine

⁴Department of Event Management and Leisure Industry, Faculty of Event Management and Show Business, Kyiv National University of Culture and Arts, Kyiv, Ukraine

⁵Department of Film and Television Arts, Faculty of Film and Television, Kyiv National University of Culture and Arts, Kyiv, Ukraine

*Corresponding author: analityk.n@ukr.net (ORCID ID: 0000-0002-3121-6221)

Received: 12-05-2022

Revised: 23-08-2022

Accepted: 02-09-2022

ABSTRACT

The article is devoted to studying creative employment in the context of digital technology development. The study aims to identify the problems of creative employment and develop the prospects for stimulating the growth of creative employment in the context of digitization. The study conducted a critical literary analysis of the concept of creating employment and its components to achieve this purpose. The research concluded that creative employment includes work in the cultural sector and a range of innovative activities. The application of statistical analysis methods made it possible to estimate global creative employment, dynamics, and structure today. IT and media are the core sectors in the formation of creative employment, and they form the many job vacancies of the big companies. At the same time, creative employment can be realized independently. The analysis showed that the digital sphere of creativity is the most promising today and in the future. Virtual reality, piece intelligence, and Blockchain are recognized as the future technologies as essential components of the IT sector. The combination of e-commerce together with traditional ones allows bringing the whole cultural creative potential to a new level, providing an increase in employment. At the same time, an essential aspect of getting a job is the creative potential of an individual and digital competencies. With this purpose, suggestions for increasing employment levels by stimulating small businesses and entrepreneurship in the creative industry are developed.

HIGHLIGHTS

- The research is aimed at identifying the problems of creative employment and developing prospects for stimulating the growth of creative employment in conditions of digitalization.
- Creative employment includes work in the cultural sphere and the entire range of innovative activities.
- The combination of electronic commerce with traditional commerce allows you to bring the entire cultural creative potential to a new level, ensuring an increase in employment.

Keywords: Creative potential, creative employment, digital technologies, e-commerce

The leading developer of modern business is innovativeness. Thus, business success and its survival in a competitive environment under market uncertainty conditions directly depend on the full realization of the creative potential of the

How to cite this article: Kuznetsova, N., Borysenko, O., Ivashchenko, O., Podhaietska, V. and Baida, I. (2022). The Creative Employment in the Context of Structural Transformations. Econ. Aff., 67(04): 601-610.

Source of Support: None; Conflict of Interest: None



workforce. That is why business administrations are interested in attracting and developing the skills and creative potential of the team. For example, the IPA Databank conducted research and found that efficiency increased 12-fold over seven years when it encouraged creative activities. There was also an increase in net profit and sales (Yvaai, 2021).

The correlation between creativity and increased income is recognized by the owners of all large successful businesses. They understand that no modern production process is without innovation, and innovation must be embodied in all stages of production, from logistics to production technology. That is why big business is interested in such employees, who can bring new relevant ideas, to be creative and critical to their business.

If we talk about creative employment in a general context, it includes not only the application of creative potential in large companies. A striking example of the realization of creative potential can be many companies that emerged in the '60s and '70s of the last century in the United States. Creative potential can be realized independently by creating your own micro business. At the same time, entrepreneurs do not have enough financial resources to buy ready-made ideas, have several advantages for the implementation of creativity, which includes:

- low initial investment;
- the ability to change priorities and improve the product during the initial development;
- the ability to be more responsive to changing market conditions;
- numerous state, municipal, and grant programs to support small businesses.

It should be noted that the development of small and micro businesses today can be significantly accelerated by integrating them with new methods of commerce. Digitalization, particularly digital sales technology, allows an additional sales field and a global reach if we talk about large companies. Small companies can start selling their products without investing in a traditional service store. Today e-commerce allows to significantly reduces the start-up costs for the organization of entrepreneurial activity. It also expands the coverage of the target audience, which helps the creative industry to appear in the regional market and reach the scale of large companies selling their products and services to all corners of the world. The potential of the creative industry in the context of digital transformation is almost unlimited. Still, several threats could negatively affect the dynamics and structure of the global labor market.

The study aims to identify the main challenges for implementing creative employment in the context of digital transformation and to show the prospects for stimulating the development of creative jobs in digitalization.

Literature Review

Creative employment has been extensively researched in both academia and business literature. It is worth noting the study of Lee *et al.* (2015), who showed the essence of creative employment and developed its classification scheme. These authors determine the relevance of the study based on the fact that creative work ensures the formation of new jobs and creates the concept of the so-called creative economy.

First, it should be noted that the term "creative industries" has many variations of interpretation and translation. There is a translation in which "industry" appears as "branch of industry in the literature. And such a variant has a right to exist in this context. Furthermore, creative industries have many other names, such as creative economy, creative and cultural industries, orange economy (Luzardo and Gasca, 2018), and cultural industries (industries related to the field of culture). What these variations of names have in common, however, is that they denote the same essence regardless of their application.

The issue of creative industries s also regulated at the legislative level by each country. At the same time, each country has its perception of the concept. For example, in Ukraine, under the creative industries, they mean types of economic activities, the purpose of which is the creation of added value and jobs through cultural (artistic) and creative expression" (2010). Experts at UNESCO (2020) know that creative industries' policies vary from country to country. They note that the definitions of creative or cultural industries, adopted at the national level, largely depend on the needs and opportunities dictated by the local policy assessment and development initiatives. For its part, the United Nations Conference on Trade and Development (UNCTAD) believes that creative industries form those activities that use intellectual capital. Such organizations as the Economic Commission for Latin America and the Caribbean (ECLAC), World Intellectual Property Organization (WIPO), Department of Culture, Media and Sports of the United Kingdom (DCMS) also agree with this opinion. So, by the example of Ukraine, we can conclude that the amount of creative employment in the country is underestimated. The situation is similar in many countries, including developed ones. Thus, in their study, Correa-Quezada, R. et al. (2018) confirm the importance of creative industries for regional and economic development at the macroeconomic level, with the notion that creative industries only include creative activities, which is based on the local regulatory framework. Lazeretti, L. et al. (2017) point to a significant increase in interest in cultural and creative industries from a research perspective in Italy. At the same time, given that the creative business is related, there are close intrinsic links between the different types of creative employment. Accordingly, if there is no market regulation of the creative industry, it will not significantly impact the economy. The underestimation of the creative industry in his study is confirmed by Klark (2015). The researcher concludes that given that the creative industries in the UK and Europe are considered economically significant, it is necessary to revise the current methodologies for their identification and introduce a more transparent procedure for calculating the results of the integration of creative industries into industrial ones. The problem of evaluating creative industries as part of the industry is also highlighted by Cunningham and Higgs (2009).

In their study, the authors point out the lack of clarity of definitions and information, which significantly affects the analysis of the creative industry. In their research, Cruz and Teixeira (2014) engage in a review of existing methodological approaches to measuring creative employment in industrial composition. The study found that the size of creative employment varies significantly depending on which approach is used. The reason is that there is no strict definition of what is called creative employment and what industries and occupations should be included in the study. Two years earlier, Cruz and Teixeira (2012) provided an overview and mapped the main accounting methods for creative classes and industries by doing an empirical study on companies in Portugal. The study concluded that more than half of the creative sector employees do not include industry statistics because they work in non-core creative industries.

In general, the author's team of this study adheres to the policy of broader use of the definition and refers to creative professions as any innovative activity in any field. However, a study by Lee *et al.* (2015) also confirms that creative potential is essential at the microeconomic level in forming productive innovation potential. At the same time, the indicators of innovative employment and the value of intangible assets correlate with each other (Scheffel andThomas, 2011). That is, these authors consider the creative industry in the context of the production of innovative products.

The creative employment market is significantly influenced by the dynamics and structure of the creative industry. Based on Scheffel and Thomas (2011), it can be concluded that the creative industries are growing faster than other sectors of the economy. At the same time, advertising and software development were the fastest growing sectors in 2011. Therefore, ten years ago, there were a large number of marketers in the global marketplace. Today, the IT and media production industries are considered the most promising in 2021 (Deloitte, 2021). Thus, the choice of future professions will be considered with this factor. Given the automation of many production processes, companies will value employees with creativity, digital competencies, and teamwork skills. Olivera and Vasconsellos (2021) made an interesting study in this area; they analyzed the relationship between self-perception of creativity, shyness, and the ability to work. They found that shyness is inversely related to selfperception of creative potential, and creativity is not guaranteed to get a well-paying job. However, the relationship between employment, creativity, and shyness has not been empirically proven.

Thus, the following conclusions can be drawn from the reviewed literature in the context of creative employment:

Creative industry is a debatable concept. It includes

a narrow and a broad meaning. The narrow one implies that creative and cultural professions form creative employment. The overall sense of a creative job means any innovative, creative activity in all industries.

- 1. Creative industry is shaped by creative potential. But the, creative potential is not a guarantee of employment or creation of own business. Other factors are crucial for employment, among which the most relevant today are digital literacy and the presence of leadership qualities that contribute to the organization of activities.
- 2. The issue of manifestation of creative employment in the context of digital technology application is the object of research and its novelty.

Research Methodology

To investigate the issue of creative employment in digitalization, a critical analysis of modern scientific research and normative documents of international organizations UNCTAD, UNESCO, ECLAC, WIPO, DCMS was conducted. In addition, the study of legislative papers of different countries showed different approaches to defining the essence of the definition of creative employment.

The article contains statistical research on the development and structure of creative employment. Several documents that have an evaluation and statistical information on the global development of creative industries in the context of employment were analyzed to obtain data for the empirical study. This statistical information is based on nine countries, including Australia, France, Germany, Italy, Japan, Korea, Spain, Turkey, and the UK. Trend analysis showed a high coefficient of determination value at 0.99, which allows reliable forecasts for the following periods to obtain indicators for the year 2020. Calculations are made using Microsoft Excel. Using the methods of statistical averages, horizontal and vertical analysis, the study resulted in the indicators of the creative industry market volume in the context of employment and its structure. Furthermore, the correlation analysis showed quite close correlations between the indicators of innovativeness and digital competence of the active population, which shows the importance of digital

skills in implementing creative potential. The work also applies general scientific research methods, which summarize information, highlighting research problems, unresolved issues, and policy implications of the current creative development.

For the presentation of scientific research, graphic methods are used.

Research Findings

Until the end of 2019, the creative economy had the fastest growth rate in the world compared to other industries. As a result, the global creative industry employment market is estimated at 30 million people in 2020. For example, the creative economy of member countries of the Organization for Economic Development (OECD) showed 100 % growth compared to the service sector. It was four times faster than the manufacturing sector and created additional jobs and opportunities for innovation (Deloitte, 2021).

Today it is customary to evaluate the creative economy not in monetary terms but in terms of the number of employed people since the monetary expression, according to many scientists, is complicated by the close relationship between creative employment and production processes. Thus, for example, Deloitte (2021) estimates that in 2018 the number of people employed in the creative industry was 18 million; given the trends in this sector and the high coefficient of determination at $R^2 = 0.99$, we can make a reasonable prediction that in 2020 the figure will be above 20 million employed people. At the same time, this statistic considers the countries where the creative industry is developing the most dynamically (Fig. 1).

Let's consider the structure of the creative economy of the year as presented in Deloitte (2021). We can conclude that at least 5.2 million people in 2020 were employed in the IT sector of the creative industry.

At the same time, the IT sector provides for the development of automation and remote operating processes for many industrial processes, which include: online sales of handicrafts, creation of online museums, creation of digital designs, online advertising, SMM, online publications on websites, blogs, online movie halls, sales of online music, online educational processes in the industry. Thus, we can conclude that digital technologies make it

Industry	Employment in creative economy, people	Share, %	Planned employment, people
Crafts	106 973	0,5	112 780,8133
Architecture	555 531	2,8	585 692
Museums	974 730	5,0	1 027 650
Design	1 054 547	5,4	1 111 801
Advertising and Marketing	1 376 076	7,0	1 450 786
Publishing	1 531 933	7,8	1 615 105
Film, TV, radio	1 548 216	7,9	1 632 272
Music	2 901 111	14,9	3 058 619
Creative occupations	4 500 272	23,1	4 744 602
IT	4 973 185	25,5	5 243 191
TOTAL	19 522 574	100	20 582 500

Table 1: Structure of the creative industry by employment

Source: Author's calculations based on Deloitte, 2021.



Source: author's calculations based on Deloitte, 2021.

Fig. 1: Dynamics of Creative Industries in 2011–2020

possible to bring almost all creative industry areas to the digital level and ensure their development in digital sales and communications with clients.

However, by early 2020, the situation had already changed dramatically, as soon as the Coronavirus epidemic turned into a worldwide pandemic and the global quarantine crisis erupted. But as Nobel laureate Paul Romer prophetically observed in 2004, "A crisis is a terror not to be lost". Thus, the pandemic was a catalyst for reforming systems of governance, science, economics, consumer preferences, and, of course, the creative industries, which in many ways have remained functional thanks to digitalization (Madarshahi, 2021). At the same time, the current situation with reducing some niches due to the Covid-19 pandemic is not a long-term one. According to experts, as soon as the pandemic is over, the creative economy will regain its position and continue to grow after returning to pre-crisis volumes, mainly due to creating employment in the IT, music, and television industries. And in the future, the connection between these three industries will only deepen (Deloitte, 2021).

Professor Madarshahi (2021) believes that create employment and the economy will develop in three directions in the future.

Print ISSN : 0424-2513

1. Artificial intelligence and the internet of things: The rapid development of artificial intelligence technology, the Internet of Things, robotics, biotechnology, nanotechnology, and quantum computing will dramatically change food, goods, and services. As a result, the position in the labor market will shift even more toward professions related to creating employment.

2. Virtual and Augmented Reality: According to Madarshahi, (2021), the virtual reality market is currently valued at \$30 billion. Therefore, the market for virtual reality is now estimated at \$30 billion (Fig. 2).



Fig. 2: Employment prospects in creative industries, million people



Fig. 3: New and promising digital creative industries related to virtual reality

At the same time, the technology is mainly applied in the gaming industry. However, the prospects of these technologies are enormous, not only in the gaming industry. According to some experts, virtual reality can completely replace all computer technology in the future and be integrated into all business automation processes. It will be enough to put on virtual reality glasses to make the workplace (VR Journal, 2017). Budding medical professionals will not have to hone their skills on live people, as their virtual actions will only lead to virtual consequences (VR Journal, 2017). Virtual reality will be necessary for education as well.

3. BlockChain: Distributed registry technology distributes information between owners, storing it on multiple computers of multiple independent users. Thus, even if various computers fail, the data will not be lost (Financial Culture, 2020).

Blockchain is now used for identity management, digital assets, tokenization, international payments, copyright protection, smart contracts, the Internet of Things (IoT), electronic voting, anonymous messaging, DDoS attacks, etc. (DeCenter, 2018).

Thus, the future of the creative economy will be based on three "whales": virtual reality, artificial intelligence, and blockchain. These technologies can bring all types of creative and ordinary industries to a new level, providing a rapid pace of development and solving employment issues in various creative industries.

Today, all of the technologies above require significant investments, so they are most actively used in large companies building their innovation capabilities to compete. However, if we talk about entrepreneurs and small businesses, digital technologies also motivate their businesses. For example, anyone who creates a product as a result of their creativity has the opportunity to become self-employed and even form their own sales team. E-business provides quite serious tools for these purposes.

Online marketplaces for hand-makers. This is a souvenir store but in a virtual space. The advantage of this sales channel is that the portal is visited by people who will look for something. Moreover, creativity monetization is not tied to the location; a product from Murmansk can be sold to a buyer from Acapulco (Voinskaia, 2013). The most popular web platforms in the world for placing the products of craft makers are Etsy.com, ArtFire, DaWanda, Craft Is Art, Zibbet, CafePress.com, ShopHandmade, MadeitMyself, Rubylane.com, Coriandr.com, etc. (Markova, 2020).

Own website. It is possible to create an image website with a detailed description of the creative



Source: Compiled by the author based on Schwab, K. (2019).



path of the author, his best works, interviews, etc., as well as (as an addition) an interline offer of products (Voinskaia, 2013). In this case, entrepreneurs do not need to invest much money in the site's development. Today, many platform constructors can organize the work of such a site for a conditional amount. The most popular website builders today are: Wix, Nethouse, Ukit, Tilda, UMI, InSales, Site123, Mozello, Fo.ru, LPmotor, uCoz, lp generator (VC, 2021).

Social networks. The advantage is a vast audience. The main thing in this business is the proper selection of the group and effective advertising, as well as frequent updating of information and regular publications (Voinskaia, 2013).

The prospects for the development of e-commerce today are enormous. Over the past decade, the market has shifted from the Pacific to Asia. While the U.S. e-commerce market was \$343.1 billion in 2019, China's e-commerce market is valued at \$862.6 billion. In addition, by 2024, some experts predict China's e-commerce market will almost double (Grodnoinvest, 2021). In this case, people can realize their potential in different fields; in particular, it can be the sale of handicraft goods, creativity, creation of online museums and exhibitions, applications and programs, writing online texts, etc.

But even though a person may be creative, imaginative, and out-of-the-box in their thinking, this is far from saying that they can bring their share of innovation to the statistics of creative employment. As Olivera and Vasconsellos (2021) have already shown, it has not been proven that creativity is the key to a career and obtaining highpaying jobs. But digital competence is essential in the production of innovation. By examining the Global Competitiveness Report statistics by selected countries (Schwab, 2019), we can see a correlation between the population's digital competence level and innovativeness (Fig. 4).

The correlation analysis shows a high correlation (Pearson coefficient = 0.89) between digital competence and innovativeness in the context of individual countries.

Thus, assessing creative employment as an innovative activity of the economically active population, we can conclude that it directly depends on the level of digital competence.

Having obtained these study results, the following directions for solving the issue of employment among the creative population in the context of digitalization can be proposed. At the state level, it is essential to:

- develop programs to train the population in digital competence;
- develop programs to train the population in e-commerce;
- stimulate the opening of small businesses related to innovation through subsidies, affordable lending programs, and tax reductions;
- launch business incubators that will allow talented people to realize their business ideas;

• simplify accounting and administrative work associated with the launch of small businesses related to innovation.

DISCUSSION

To date, the question of the development of creative employment in the context of digital transformation is not today quite debatable. At the same time, most studies conducted in this area can be divided into two groups. The first group of researchers studies the positive impact of digitalization on the development of the creative industry. The second group, on the contrary, shows the threats of digitalization and the development of a new generation of workforce, which will not be able to realize their creative industry.

Let us consider the main points of discussion to fully disclose the prospects and threats to the development of creative employment in the context of digital transformation.

Many scholars believe that digitalization and creativity can become a single engine of economic progress in the world (Think Creative, 2016). In their study, Anantrasirichai and Bull (2021) reveal the potential for the creative industry to evolve in integration with advanced technology. By bringing artificial intelligence technologies together with creativity, humanity can gain a whole new kind of interaction that can create content, analyze information, improve workflows, improve information, and compress data.

The digital shift has created new business models in production, distribution, and consumption, a symbiosis of high-quality content with technology. The most successful example of the benefits of using creativity and digital technology together is the museum business (Think Creative, 2016). Many museums worldwide have integrated into the digital age, successfully adopting useful technologies from displays to interactive devices - that help maximize the value of collections and the visitor experience. The British Museum, for example, has a digital learning center that introduces children and teens to its collection. Augmented reality technology, image recognition, and 3D printing can be used. More than 50,000 visitors have gone through the training program in the first five years. The digital industry has become a growth driver for the creative economy, steadily increasing annual revenues. According to experts, this trend has significant growth potential in the future. This is supported by increasing the supply of mobile gadgets year by year and their development and integration with all spheres of life (Think Creative, 2016).

Thanks to the new challenges, it is clear that it will be possible to include professions that did not previously belong to them in creative employment soon. For example, a surgeon must be proficient in information technology to perform surgical interventions remotely. To conduct distance learning, a teacher will need to use Internet technologies. An engineer can remotely print a prototype or modify parts on a 3D printer (Madarshahi, 2021).

On the other hand, researchers show the problems of digital transformation in the context of workforce training. To date, it is believed that the problem of most modern people is that the boundary between the virtual and real-world is very blurred (Shpitsberg, 2014). This problem is particularly acute concerning the digitalization of children and adolescents with fragile psyches. Some scholars believe that excessive digitalization has a destructive effect on the mental and physical health of the current generation (Bagaeva and Myltasova, 2016). Over time, favorite computer games, apps, and cartoons become the basis of the future person's worldview.

Even though under the influence of electronic games, a child can learn to read, count, and develop memory, attention, and logic, in many cases, their individual creative development is stunted (Tkhostov, 2005). According to the mark of many parents, children avoid live communication with peers, which does not allow them to develop essential communication skills for employment. Teenagers stop reading books, and do not go to exhibitions, theaters, or museums, preferring to watch movies, which is detrimental to health and physical development. Thus, the new generation will not be able to physically be at work for a normalized time, which also negatively affects the possibility of future employment. That said, health is not the only negative side of digitalization. In childhood and adolescence, the formation of imaginative thinking takes place. This is why it is essential to engage all channels of perception. Unfortunately, electronic devices do not actively engage tactile, tactile, and olfactory perceptions. As a result, children undergo one-sided development, in which sensory information is absent. This naturally deprives the child of being creative since they cannot go beyond the limits provided by the program options.

Consequently, improper use of information technology can contribute to the deterioration of children's health and physical condition. Moreover, if we do not already practice restrictions on the influence of digitalization on the young generation, very soon, only a few will be able to engage in creative activities.

CONCLUSION

Analysis of the literature, regulatory documents, and provisions of international organizations allows us to draw several conclusions:

- creative employment is a concept formed in different states at their discretion;
- creative employment can have a narrow meaning and express jobs in the cultural sector;
- in a broader sense, creative employment involves the creation of intellectual capital;
- there is no unified normative methodology for evaluating creative employment today;
- integration of digital technologies in all spheres of activity allows to increase significantly the level of development of economies and, accordingly, employment;
- at the same time, there is a problem of excessive digitalization of young people and adults, which can negatively impact the formation of imaginative, critical, and innovative thinking.

The results of the empirical study lead to several conclusions:

- The creative industry employment market value is 30 million people, with 20 million jobs forming nine countries. The Asian market is currently the most developed in the creative industry.
- The main components of the labor market in the creative industries are IT (25 %) and the media sector (23 %).

• Digital competencies are fundamental for the realization of the country's innovation potential.

Recommendations for improving the level of employment in the creative industry are related to government programs for training in digital competencies, including e-commerce, financial incentives for launching innovative businesses, and the formation of a business environment to develop creative and innovative entrepreneurship.

REFERENCES

- About culture: Law of Ukraine of 14.12.2010 No. 2778-VI. Date of update: 16.07.2020. URL: https://zakon.rada.gov.ua/.
- Anantrasirichai, N. and Bull, D. 2021. Artificial intelligence in the creative industries: a review. *Artif Intell Rev.* URL: https://link.springer.com/article/10.1007%2 Fs10462-021-10039-7. DOI: https://doi.org/10.1007/s10462-021-10039-7. Last accessed on 13th April,2022
- Bagaeva, E. and Myltasova, O. 2016. Internet in the life of modern youth: problems and prospects. Materials of the XIX International Conference "Culture, Personality, Society in the Modern World: Methodology, Experience of Empirical Research". Yekaterinburg, UrFU.
- Blockchain application, or what DLT use cases are being implemented today (2018). *DeCenter*. URL: https:// decenter.org/ru/primenenie-blokcheina. Last accessed on 13th January,2022
- Blockchain: what it is and how it is used in finance (2020). *Financial culture*. URL: https://fincult.info/article/blokcheyn-chto-eto-takoe-i-kak-ego-ispolzuyut-v-finansakh/.
- Clark, D. 2009. Crunching creativity: an attempt to measure creative employment. *Creat Ind. J.*, **2**(3): 217–230.
- Correa-Quezada, R., García, J., Rama, D. and Maldonado-Erazo, C. 2018. Role of Creative Industries as a Regional Growth Factor. *Sustain.*, **10**(5): 1649.
- Creativity: Why Develop Employee Creativity? 2021. *Yva.ai.* URL: https://www.yva.ai/ru/blog/motivaciyatvorcheskoi-aktivnosti.
- Cruz, S. and Teixeira, A. 2012. Methodological approaches for measuring the creative employment: a critical appraisal with an application to Portugal. *FEP Working Papers*, 455. URL: https://www.researchgate.net/ publication/254442385_Methodological_approaches_ for_measuring_the_creative_employment_a_critical_ appraisal_with_an_application_to_Portugal.
- Cruz, S. and Teixeira, A. 2014. Assessing the Magnitude of Creative Employment: A Comprehensive Mapping and Estimation of Existing Methodologies. *Eur. Plan Stud.*, 22(10): 2172–2209.
- Cunningham, S. and Higgs, P. 2009. Measuring creative employment: Implications for innovation policy. *Innovation: Organization & Manag.*, **11**(2): 190–200.

Lazzeretti, L., Innocenti, N. and Capone, F. 2017. The impact

Kuznetsova *et al*.

of related variety on the creative employment growth. *The Annals of Reg. Sci.*, **58**(3): 491–512.

- Lee, K., Park, T. and Chung, K. 2015. Classifying and Analyzing the Creative Employment in Korea. *Korean Manag. Sci. Rev.*, **32**(4): 237–254.
- Luzardo, A. and Gasca, L. 2018. Launching an Orange Future: Fifteen Questions for Getting to Know the Creative Entrepreneurs of Latin America and the Caribbean. *Inter-American Development Bank*.
- Madarshahi, M. 2021. The role of digital economy in advancing creative industries. *Creativity 2030 seminar*. URL: http://city.cri.cn/20210507/633e86e4-7cc0-92c5-a18c-439c6dec1d4b.html.
- Markova, O. 2020. Where can I sell handmade works. Foreign sites. *Freelance Today*. URL: https://freelance.today/birgi/ gde-mozhno-prodat-raboty-sdelannye-svoimi-rukamizarubezhnye-ploschadki.html.
- Olivera, J. and Vasconcellos, S. 2021. Creativity, shyness and employability. *Revista Alcance.*, **28**(3): 355–373.
- Parrish, D. 2021. Creative Industries definitions. *David Parris*. URL: https://www.davidparrish.com/creative-industriesdefinitions/. Last Accessed on 19th January, 2022.
- Prospects for the development of virtual reality, 2021. *VR J.* URL: https://vr-j.ru/stati-i-obzory/perspektivy-razvitiyavirtualnoj-realnosti/. Last Accessed on 16th March, 2022.
- Scheffel, E. and Thomas, A. 2011. Employment and intangible spending in the UK's creative industries A view from the micro data. *Econ. Labour Market. Rev.*, **5**(1): 79–104.
- Schwab, K. 2019. The Global Competitiveness Report 2019. WEF. URL: https://www3.weforum.org/docs/WEF_Th eGlobalCompetitivenessReport2019.pdf. Last Accessed on 14th January, 2022.
- Shpitsberg, A. 2014. The influence of information technology on the activities of modern society. *Young Scientist*, 2: 81–83.

- The creative industry and the role of printing in the modern market for creative ideas. (2016). *Think creative*. URL: https://canon.a.bigcontent.io/v1/ static/636899603128963291MK_think_guides_03_en. Last Accessed on 4th January, 2022.
- The future of Creative Economy, 2021. *Deloitte*. URL: https:// www2.deloitte.com/content/dam/Deloitte/uk/ Documents/technology-media-telecommunications/ deloitte-uk-future-creative-economy-report-final.pdf. Last Accessed on 13th November,2021
- Tkhostov, A. and Surnov, K. 2005. The influence of modern technologies on personality development and the formation of pathological forms of adaptation: the reverse side of socialization. *Psychol. J.*, **6**: 16–24.
- Top 12 Website Builders Ranked 2021, 2021. VC. URL: https:// vc.ru/u/724093- seo-b/217315 top-12-konstruktorovsaytov-reyting-2021-goda. Last Accessed on 7th January, 2022.
- Trends: Top 6 Global Internet Commerce Trends, 2021. *Grodnoinvest*. URL: https://grodnoinvest. by/press-center/ trendy-top-6-tendencij-razvitiya-globalnoj-internettorgovli/. Last Accessed on 14th January, 2022.
- Voinskaia, S. 2013. Handmade: customers and points of sale. *Encyclopedia of Marketing*. URL: https://www.marketing. spb.ru/lib-special/branch/handmade.htm. Last Accessed on 14th January, 2022.
- What do we Mean by the Cultural and Creative Industries? 2020. UNESCO. URL: https://en.unesco.org/ creativity/ sites/creativity/files/digital-library/What%20Do% 20 We % 20Mean % 20by%20CCI.PDF. Last accessed on 18th December, 2021.