

# The impact of information technology development on the business environment of creative industries

**Evita Pilege**

*ISMA University of Applied Sciences, Latvian College of Culture, Latvia*

*Corresponding author's e-mail: evita.pilege@gmail.com*

---

## Abstract

Advances in information technologies are changing the whole social and economic scene and requirements for the labour market not only in technology-related industries, but also in creative industries, humanities and social sciences. The aim of this paper is to examine how these changes have affected the creative industries, analyse the changes that have occurred in its external business environment and reflect on how much the sector has changed digitally.

*Keywords:* entrepreneurship, data, analytics, education

---

## 1 Introduction

This paper focuses on the development of creative industries its external business environment in the context of data economics and advanced technologies. In recent years there has been a growing interest in adoption of new technologies. Much work on the challenges and opportunities of technologies has been carried out, however there are still some open questions. Many studies and reports have been published on the importance of technological change on a global scale. Researches show that technologies changes how people, organisations and governments live, interact and work [1]. Digital technology continues to be one of the major forces shaping our society today [2]. It transforms economies and societies, all industries are affected by the digital transformation [3]. Opportunities offered by data resources are progressively engaging also human disciplines, for example, history, archaeology, law, and politics [4]. Creative industries are not an exception.

## 2 Information technology development impact on demanded skillset

It is particularly interesting to analyse the development of creative industries in the context of technology because of the long-standing opposition between the technology and creativity. Although technological development is highly regarded in the economic context, technology and creativity have been long perceived as incompatible concepts. It is often misunderstood that the development of technologies and automatization will make the human workforce redundant. Unlike these expectations, the technology will increase the need for human expertise. As reported in European Union (EU) study, virtual and augmented reality represent important technological advancements and innovations and are a growing sector of interest for the creative sector. Both the digital shift and globalisation have had a strong impact on cultural and creative operators - they continually need to develop and adapt competences and contents to the rapid pace of the digital innovation.

The results of the studies carried out so far have led to an interesting conclusion. Leadership now needs to be combined with creativity, innovation and digital literacy.

Among the future transferable skills of employment, creativity is considered as the most significant predictor for an occupation's chance of growing [5]. Consequently, in order to ensure the competitiveness, development and contribution to the global economy, creative industries are forced to change.

Transformations have affected the external business environment at different levels, making it necessary to make changes to the internal environment of companies and organisations. The aim of the following sections is to clarify how above-mentioned processes have transformed the external business environment.

## 3 External business environment: policies and technologies

The external business environment is in continuous development and determines business activities and opportunities. Ability of companies to accept and adapt changes affects the competitiveness of countries and regions in the global market in the so-called digital era - era of the data economy. The following paragraphs will highlight some significant changes that have occurred in the external environment at the level of policy and technological development.

Policy makers are commissioning research on technology applications in industries and developing better policies. A *Digital Single market* strategy is one of the strategies developed at EU level. The EU is committed to set global standards for emerging technologies and has set a goal to remain the most open region for trade and investment in the world. At the same time, EU aims to create an environment where companies of all sizes and in any sector can compete on equal terms, and can develop, market and use digital technologies, products and services at a scale that boosts their productivity and global competitiveness, and consumers can be confident that their rights are respected [6]. It is expected that the digitalization, new technologies and strengthening of the Digital Single Market will increase distribution and access to culture and creative production. *Europe's General Data Protection Regulation (GDPR)*, the privacy legislation that went into effect in May 2018 represents the first large-scale effort in the world to offer

consumers more legal protection. In the field of creative industries, an initiative *Creative Skills Europe* was launched in November 2014 by a partnership of European trade unions and employers' organisations.

Surveys and qualitative analyses have shown that the general technology shift and the acquisition of digital skills represent key challenges for the development of the sector. The digital shift has also deeply impacted the sector's business models, demanding even stronger capabilities to innovate and experiment with new development schemes [7]. The above-mentioned initiatives are some examples, however there is still a need to develop new policies and harmonize them.

As a result of the development of information technologies, it is possible to use different platforms, programmes, technologies and improve the functioning of organisations in different sizes and financial capabilities. As concluded by the Organisation for Economic Co-operation and Development (OECD), digital technologies allow firms to access multiple geographical and product markets almost instantaneously, sharing ideas and exploiting increasing returns to scale. They are generally associated with lower costs of operations and of entry into a market, even across borders, thus potentially increasing competition among firms for the market itself. Thanks to sustained technological progress, information technology products have become much cheaper and more powerful over time.

Some of the benefits brought by advanced technologies are:

- *Mobile connectivity* has undergone major improvements starting with the launch of 3G at the beginning of the millennium and 5G is now in the early stages of roll out.
- The number and growth of *top-level domains* (TLDs) associated to websites provides an indication of the increased content hosted by the Internet. TLDs reached close to 350 million in the third quarter of 2018. By that time, the .com generic domain had reached 135 million out.
- *Capacity for data transmission* is increasing everywhere, including developing economies. Cross-border data flows enable businesses to effectively co-ordinate their, supply, production, sales, after-sales, and research and development processes in global markets.
- *Data centres* - the analysis of big data coming from

ubiquitously networked end-user devices and the internet of things – has added to the value and growth of data centres.

By reducing or avoiding the large fixed costs associated with investment in new information technology equipment, purchases of information technology services allow companies to reduce the costs of experimenting with new technologies, scaling up, and adapting technology use to the business cycle [8].

#### 4 Impact of the external environment on creative industries

Digitisation and advanced technologies are having an important impact on the creative industries. Analysis of creative sectors shows that a large part of companies integrate technology into their activities, but their application levels and quality differ. Studies show that an increasing number of consumers have access to more creative content at lower costs, as content creators benefit from reduced production and distribution costs which have lowered barriers to entry and deliver content on a wider range of devices. The direct link with consumers has facilitated an increasingly competitive environment that has led to the developing of new business models in most of creative industries. It is transforming working processes and operations, such as audience development, ticketing and communication. The digital environment has enabled new development opportunities, for example in data-driven marketing or live streaming, and has offered new perspectives of creation with works specifically curated for the online environment, as well as new revenue streams. [9]

#### 5 Conclusions

The development of technologies has a significant impact on the economy, society and various industries, including creative industry. Various initiatives have been taken on external business environment level in order to ensure the competitiveness of the European Union and other regions and provide the necessary infrastructure, however there are various aspects that prevent the full use of the opportunities they provide and the development of businesses.

#### References

- [1] OECD 2020 *Going Digital integrated policy framework*, OECD Digital Economy Papers 292 OECD Publishing: Paris p 50
- [2] Bandopadhyay S, Wong M 2019 *Digital Culture* MTM and Nesta: London p 19
- [3] OECD 2019 *Measuring the Digital Transformation: A Roadmap for the Future* OECD Publishing: Paris 45
- [4] Schiuma G, Carlucci D 2018 *Big Data in the Arts and Humanities: Theory and Practice (Data Analytics Applications)* Auerbach Publications 17
- [5] KEA and PPMI 2019 *Research for CULT Committee – Culture and creative sectors in the European Union - key future developments, challenges and opportunities* European Parliament, Policy Department for Structural and Cohesion Policies: Brussel 7-34
- [6] European Commission *The European Digital Strategy* **E-source:** <https://ec.europa.eu/digital-single-market/en/content/european-digital-strategy> Apr 19 2020
- [7] 2016 *Trends and skills in the European audiovisual and live performance sectors* European Skills Council for employment and training in the Audiovisual and Live Performance sectors: Brussels p 9
- [8] OECD 2019 *Measuring the Digital Transformation: A Roadmap for the Future* OECD Publishing: Paris 38-48
- [9] 2016 *Trends and skills in the European audiovisual and live performance sectors* European Skills Council for employment and training in the Audiovisual and Live Performance sectors: Brussels 34-9