

**DIGITALIZATION OF BUSINESS PROCESSES BY THE EXAMPLE
OF CREATIVE INDUSTRIES**

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ABSTRACT. The article explores approaches to solving the problems of digitalization of business in the context of modern digital trends, revealing the specifics of the use of digital technologies in different countries. The research in the field of creative venture investments is analysed to identify the potential and threats of digitalization on the example of creative industries.

Keywords: creative industry, business digitalization, investments.

INTRODUCTION. Different types of businesses use different forms of digitalization. One company may want to go digital to update its inventory management system, while another may want to go digital to offer better customer service. Digitalization can benefit a business if it sells products or services. For example, it can make it easier to track and manage products and create digital supply chains where accurate data can be collected at every stage. If a business sells physical goods, it can digitize internal processes in a number of ways. Inventory management can be a huge problem, especially if done manually. Investing in a digital inventory management system can streamline operations and make it easier to track stock. You can then gather accurate data on the products stored, identify damaged products, and send packaged products out for dispatch. You can also simplify this process by issuing digital invoices instead of printing paper invoices. Digital invoices are paperless, making them more environmentally friendly and easier to review and process. Digital invoices also produce fewer errors and do not take up physical space. One of the big benefits of digitalization with digital invoices is that invoicing and inventory systems can communicate directly, allowing you to manage inventory without analogue interference. The invoice amount is removed from the inventory of work in progress. Finally, accounting software

can simplify financial reporting for businesses. Thanks to digitalization, transactions can be recorded, entries can be made and final analysis can be done with just a few clicks on a laptop.

Relevance of the problem. Cross-border digital data flows are at the heart of all rapidly evolving digital technologies such as data analytics, artificial intelligence (AI), blockchain, the Internet of Things (IoT), cloud computing and other Internet services. The topic is relevant because enhanced data flows are essential to achieving virtually all of the Sustainable Development Goals, and countries around the world are trying to determine how to address them.

Analysis of recent research and publications. The Digital Economy Report 2021 was prepared under the overall guidance of Shamika N. Sirimanne, Director of the Division on Technology and Logistics, by a team comprising Torbjörn Fredriksson (team leader), Pilar Fajarnes Garces (lead author), Laura Cyron, Martine Julsaint Kidane, Woong Joe Ko, Vincent Riegel, Marcin Skrzypczyk and Thomas van Giffen.

Problem definition. The ultimate approach to addressing the digitalization of business processes chosen at national and international levels will affect not only trade, innovation and economic progress, but also a range of issues related to the distribution of benefits from digitalization, human rights, law enforcement and national security.

Methods: A review of research on cross-border data flows from different perspectives, an overview of global developments and inequalities in the digital economy, an examination of governance approaches at national, regional and multilateral levels.

RESEARCHING RESULTS. The creative industries contribute around \$3 trillion to global GDP in 2020, but their ability to support inclusive and sustainable economic growth in emerging markets often remains invisible, especially when compared to traditional sectors such as natural resource extraction, manufacturing and financial services. However, emerging markets have historically faced significant challenges in formalising and commercialising their creative wealth. Disrupted creative value chains combined with weak enabling environments have created a fragmented environment with high costs of creative production and limited local and global distribution and monetisation channels for emerging market artists. The fragmented nature of the sector also means limited coverage and enforcement of institutional frameworks for the protection of creative assets (intellectual property), limited public promotion of the sector, and a lack of available infrastructure, funding and skills for sector development.

The adoption of new digital technologies, driven in part by the challenges creatives have faced in developing and marketing their products, is opening up new opportunities for content production, distribution and monetisation. The dramatic drop in the cost of media recording technologies such as cameras and microphones has also helped more artists purchase equipment.

Consumer-facing digital technologies such as music streaming (Spotify, Pandora), streaming and film production platforms (Netflix, Amazon Prime), technology apps for creators (YouTube, Instagram, Facebook) and e-commerce (Etsy) - combined with mobile money solutions - have similarly lowered barriers to discovering, distributing and generating revenue from creative content. For example, musicians in Kenya, Tanzania and Uganda used to derive most of their income from live performances, but digital platforms like Mdundo have enabled over 90,000 artists in these countries to sell their music to a global audience.

Importantly, breakthrough technologies have enabled the creative industries to become an investment sector for the first time in many emerging markets. Digital platforms allow artists to track revenue and open up avenues for new forms of income generation such as brand promotion and advertising. New technologies also remove technological and legal barriers to production and thereby protect intellectual property. Evidence on the potential impact of digitalization on the protection of creative assets in developed markets highlights that turning to licensed streaming alternatives can reduce piracy. Non-fungible tokens (NFT), a relatively young blockchain technology that tokenises and records digital assets in a digital registry, helps ensure copyright protection and allows artists to be remunerated for their work. These technologies also generate data on the creative industries, helping governments to understand the relevance of the creative industries and develop evidence-based policies to promote them [1].

Measuring cross-border data flows is even more challenging. In terms of volume, the most commonly used indicator is the total international Internet bandwidth used. This refers to the amount of data transferred in bytes, but does not show the direction of flows or tell us about the nature and quality of the data. Available information also indicates that international bandwidth use has accelerated recently and that such traffic is geographically concentrated on two main routes: between North America and Europe and between North America and Asia.

In assessing the implications of data and cross-border data flows for development, some key digital divides and imbalances need to be taken into account. Only 20 per cent of people in least developed countries (LDCs) use the Internet; when they do, it is usually at relatively slow download speeds and relatively high cost. In addition, the nature of usage varies. For example, while in some developed countries up to 8 out of 10 Internet users shop online, in many LDCs the figure is less than 1 in 10. In addition, there are significant differences within countries between rural and urban areas, and between men and women. Gender disparities are greatest among LDCs and in the African region.

In terms of the ability to participate in and benefit from the data-driven digital economy, two countries stand out: the United States and China. Together, they account for half of the world's

hyperscale data centres, the fastest 5G adoption rates in the world, 94 per cent of all funding for AI startups over the past five years, 70 per cent of the world's top AI researchers and nearly 90 per cent of the market capitalisation of the world's largest digital platforms. Big platforms such as Apple, Microsoft, Amazon, Alphabet (Google), Facebook, Tencent and Alibaba are increasingly investing in all parts of the global data value chain. They are collecting data through user-centric platform services, transmitting data via undersea cables and satellites, storing data in data centres, and analysing and processing data using AI. These companies have a competitive advantage in data because of their platform component, but they are no longer just digital platforms. They have become global digital corporations with planetary reach [2].

Improving digital literacy among the population, including people living in rural and marginalised communities, is key to building an inclusive digital economy. This requires investment at all levels of the education system, as well as initiatives aimed at businesses and consumers.

As emphasised in UNCTAD (2021b), education policies should enhance data literacy, digital skills and data talent. This knowledge is likely to be concentrated in urban areas among those who already have relatively high levels of education. It is therefore important to spread digital literacy initiatives to young people and those living in rural areas. Strengthening the overall entrepreneurial ecosystem is also important for building the digital economy. It is recommended to expand entrepreneurial support services by expanding available co-working, incubation and business accelerator programmes. This requires support from governments, the private sector, and regional and international donors [3].

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invoices is that invoicing and inventory systems can communicate directly, allowing you to manage inventory without analogue interference. The invoice amount is removed from the inventory of work in progress. Finally, accounting software can simplify financial reporting for businesses. Thanks to digitalization, transactions can be recorded, entries can be made and final analysis can be done with just a few clicks on a laptop [4].

Business growth depends on accurate numbers, and business digitalization can help organise and structure data to make key decisions. Moving data from legacy systems to the cloud makes it easier to view, analyse and interpret. Processing data digitally is much faster, meaning that businesses can quickly solve problems or proactively prevent them. First of all, you need to decide what data you need. Google Analytics is great for tracking key website performance indicators such as page views, clicks and conversions. This data can help optimise a website to attract more leads and increase sales. MailChimp and Emarsys can provide information to help understand customer needs.

Cloud-based software tools that are ISO-20071:2013 approved will provide greater data security. A secure set of tools will help to comply with regulations and avoid data breaches and intellectual property theft. Investing in secure digital software systems can prevent data from falling into the wrong hands and prevent stakeholders and customers from losing trust, which can be fatal to a business [5].

With knowledge management software in place, a company can track employee engagement and create an actionable report on how the team is performing, what knowledge is helping them succeed, and where there is room for improvement. Being able to report on how the company's knowledge is being used allows teams to better understand how they should be spending their time.

Understanding what questions people are asking is essential to building the business knowledge base and improving operations. With a knowledge management platform, companies can be more proactive and make strategic plans rather than just reacting to situations. Knowledge management is a critical aspect of enterprise digital transformation as it helps businesses consistently make the most of the data, knowledge and insights that exist across the organisation [6].

The digital world has opened up radical new opportunities for new business creation, investment and marketing. It has created whole new sectors of social enterprise. And its power extends far beyond the economy. Social innovation movements and digital technologies are now inseparable, they stimulate each other and foster each other's creativity, whereas fifteen years ago they had no connection at all. Social media are changing the way people relate to each other and

their communities, and are also radically changing politics and the political participation of citizens [7].

Despite the importance of the creative industries to the economy, lack of investment has long been a common problem. As many studies have shown, investors often do not have a full understanding of creative enterprises and are more cautious about investing in such businesses. Creative industries are known to be high risk for venture capital. Cultural and creative companies face challenges in obtaining investment in new projects. Key issues that make it difficult to invest in this industry include the following:

1. Lack of tangible assets to offer as collateral, dependence on intangible assets (e.g. copyrights, licences)
2. Lack of knowledge on how to assess the economic value of these intangible assets.
3. A perceived lack of business and management skills, reliance on public investment schemes, particularly in the case of performing arts, museums and visual arts.
4. Uncertainty and size of the market, lack of market information, pressure of digitalization.

While many cultural and creative industries are dependent on public funding and do not utilise venture capital funding (e.g. museum and performing arts), analysing these databases can reveal trends in start-up firms developing technology and addressing specific needs of the creative industries.

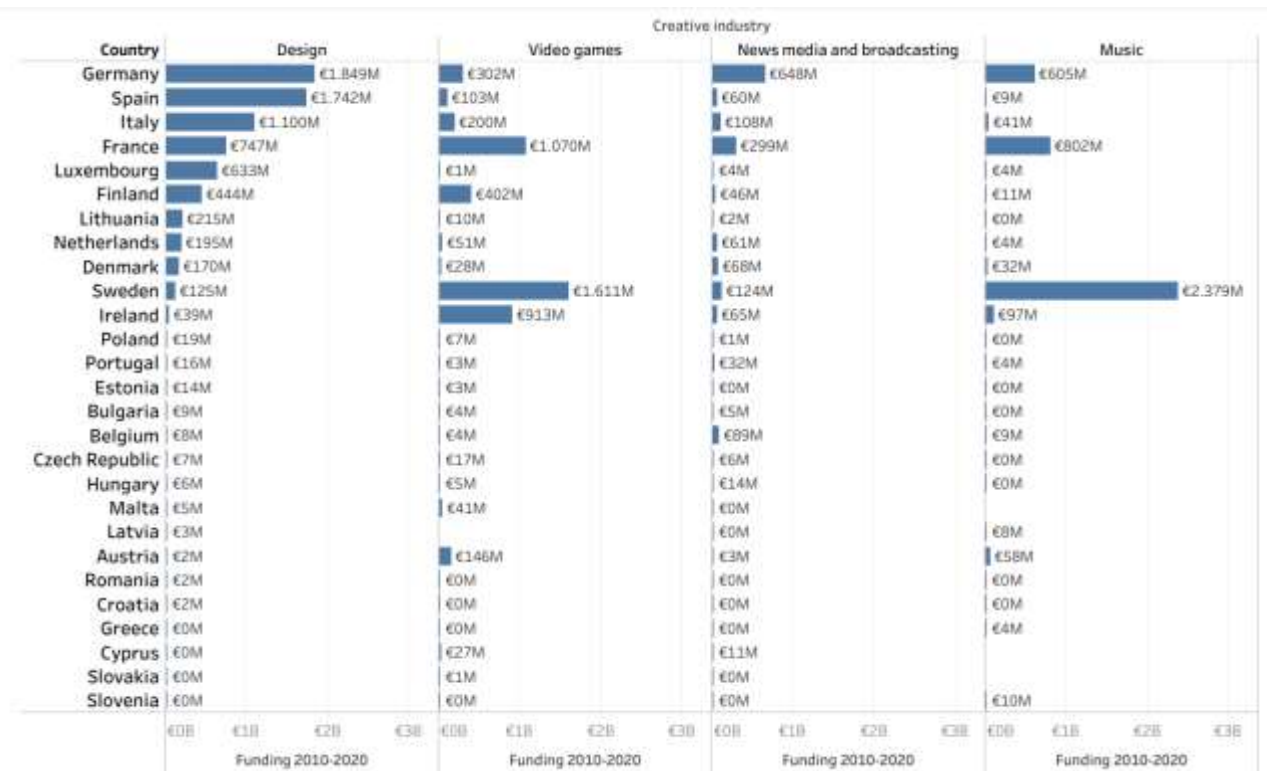


Diagram 1. Venture capital and private investment in the creative industries 2010-2020.

The investment figures presented in Diagram 1 refer only to funding rounds whose value has been disclosed. Analysis based on Crunchbase and Dealroom data allows us to examine the following sub-sectors identified in these databases: gaming, video and online gaming, music, media, architecture, visual arts, performing arts (theatre), and design.

Digital technologies have benefits but also a number of risks that need to be addressed and mitigated. An automated production process will reduce the cost of producing creative work, which corresponds to the deflationary effect of technology. Reducing the cost of producing creative work in turn reduces the cost to consumers. The adoption of AI in the creative industries is expected to make fewer AI producers and products winners, potentially reducing competition among AI producers and creating a monopolised AI market in the creative industries.

Copyright will be another key issue that needs to be addressed in the case of the creative industries. Problems with copyright and attribution of ownership of artwork created using an algorithm raise many complex legal and ethical issues [8].

Another important tool that can be used in the digitalization of business processes is cross-sectorality. Cross-sectorality is the cooperation of other sectors with cultural projects. For example, combining culture and audiovisual content through digital technologies. Such projects are beneficial for both sectors: they show how new technologies can be suitable for different areas of life, and culture reaches new audiences. In particular, the most popular cross-sectoral projects nowadays are those that use virtual or augmented reality: whatever the topic, it will interest many more people in VR. And not only because of the vivid storytelling, involvement in events, and the opportunity to feel yourself in another place or time, but also because new and unfamiliar technologies attract more attention than a film or installation.

VR also provides an experience that involves different senses: hearing, sight, sense of space, sometimes even tactility and smell. The benefits of virtual reality have long been used in education (doctors perform surgeries in VR), advertising (brands create wrappers and packaging that come to life in the app), entertainment (video games in virtual reality), journalism (readers are given the opportunity to explore a particular area on their own), and more [9].

Business digitalization is a continuous process. You need to be prepared for the fact that, having implemented any software in the company's work, it will have to be updated and improved in accordance with new directions in the market of technological developments. However, the final result of modernising business processes provides many benefits:

- expansion of the target audience, sales channels, geography, etc.
- automation of routine processes and simplification of some tasks.

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- improving the level of service, which provides the customer with new opportunities: fast purchase and delivery, tracking the entire chain of goods.
 - adjustment of the company's activities based on analytical data.
 - reducing the budget for the implementation of marketing strategies without compromising the effectiveness of promotion.
 - reducing the percentage of lost customers and minimising errors during the checkout process.
 - increase financial benefits by reducing unprofitable investments.
 - a personalised approach to customer service that increases brand loyalty and improves the customer experience.
 - robotic tools for 24/7 consultations allow us to shorten the customer journey from contact to order.
 - increase sales in offline stores with the help of new technologies.

Despite many advantages, business digitalization, like any other process, has certain disadvantages. To successfully develop your business with the help of digital solutions, you need to take into account weaknesses:

- unwillingness of certain customer groups to adopt new technologies.
- the need to think in advance and create a chain of interaction with the client that will be convenient for both parties.
- consultations in certain areas of trade, for example, when selling expensive equipment, require a live salesperson. The customer wants to hear a human opinion to make a decision.
- the time and cost of implementing digital solutions may not meet the expectations of the business owner.
- lack of qualified employees to support digitalisation tools.
- to remain competitive and meet customer demands, it is necessary to implement up-to-date digital solutions.

Successful digitalisation of an online platform involves the implementation of one or several technologies at once:

- artificial intelligence (AI), which automates data management operations to improve productivity. In addition, AI allows collecting and analysing customer data, predicting behaviour, and adapting content to their interests. More personalised offers, according to 59% of customers, provide them with a positive consumer experience and influence their purchasing decisions.

- a CRM system is used to ensure business omnichannelisation by serving different ways of communicating with consumers. It is suitable for any business, regardless of its industry and size. CRM helps to store all information about customers, record failures and problems in service, analyse sales opportunities, build marketing campaigns, and more.

- a PIM system is a tool for managing product information. With its help, marketplaces automate manual processes of adding content to the website, significantly reducing the time for moderation and displaying products on the storefront.

- chatbots and other robotic customer support systems. These technologies have gained widespread popularity in call centres and later spread to e-commerce apps and websites. They provide round-the-clock assistance, help resolve simple queries, and advise users on company services. Chatbots have the function of memorising information (delivery address, customer details), which makes it easier for visitors to place orders again. For businesses, automated communication is useful because it frees up employees' working time, helping them to focus on other business operations.

- augmented reality (AR) allows for virtual fitting and demonstration of products in 3D. Such technologies are very convenient for customers of online stores. The opportunity to "get to know" the product, albeit virtually, significantly increases consumer loyalty to the marketplace.

According to statistics, 46% of businesses use business intelligence tools, and more than 50% of the total number of companies have implemented robotic systems to analyse large amounts of information and provide customer service. In addition to these, digitalization includes many other tools that help businesses grow [10].

CONCLUSION. Digitalization is the optimization of business through the implementation of IT solutions and relevant technical equipment. Such technologies help improve the company's operations in various areas: marketing, customer service, logistics, internal processes, etc. To better understand the need for transformation, you need to have a clear understanding of this process and not confuse it with digital business model restructuring.

Digitalization is a way of developing business activities when changes are aimed at a simpler, more cost-effective and reliable way of working. It applies to both customer service and internal processes. However, digitalization does not imply a shift to a completely new trading model.

Most companies already use digital technologies in their operations, combining them with each other. Business process management systems or customer communication tools are good tools

for active development. It is important to remember that successful digitalization starts with the right approach to technology selection.

Professional developers can help in this matter by providing advice on IT products for enterprise transformation. In addition, digitalization should be accompanied by management support and understanding of the goals of this process at all levels of the company. This is how you can achieve a harmonious integration of a particular tool into any business project.

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