THE INFLUENCE OF AI ON CONTEMPORARY GALLERIES

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Abstract

The present research presents partial results of a comprehensive research, which examines the use of artificial intelligence among art institutions in Hungary and Slovakia (these can be contemporary galleries and museums). Among other things, the extent to which these institutions use artificial intelligence in the development of the institution's operational strategy, or how they can embed the assumed usefulness of artificial intelligence in the operation of the institution, be it the creation of an exhibition or a tool shaping the gallery's marketing strategy. This study presents partial results on the trends in the connection between digitization and contemporary art, and on the closely related ethical issues. A total of 10 in-depth interviews were processed in the research, from which it was revealed that in the two countries examined, the use of artificial intelligence in the creative sector is not a requirement, however, 90% of the participants are regular users of the software, and the biggest dilemma is the copyright issues of artificial intelligence.

Key words: art, artificial intelligence, art market

JEL Code: M30

Introduction

The research starts from the assumption that artificial intelligence has transformed the user experience in the exhibition space of galleries and museums as a whole. During the research, we examined two countries, Hungary and Slovakia. At the moment, we have few sources available about the user-level knowledge of professionals working in art institutions in Slovakia and Hungary about artificial intelligence as a possible work tool. The lack of this knowledge encouraged us to investigate whether the cultural mediation specialists and some artists working in the art institutions of the two countries have knowledge about the use of artificial intelligence, and what their ethical understanding / attitude towards the software is.

Among our motivations was to map the extent to which the two Central European countries can in the future meet the predictable trend that artificial intelligence will be part of the practice of contemporary art, its influence and use will peak in the field of art creation, style analysis, data

collection, style patterns in art history, or in influencing the time and quality of the visitor's time spent in the exhibition space.

The purpose of the research is to answer, among other things, the extent to which art institutions in Hungary and Slovakia (these can be contemporary galleries and museums) currently use artificial intelligence during institutional work, whether the respondents see a closer connection to the use of artificial intelligence between its breakthrough and the pandemic, and in their opinion, whether this period as a whole had an effect on the (transformation) of digitization and contemporary art.

First of all, it is important to understand how the process of creation is transformed with the help of artificial intelligence, through what systems and programs an image can be created when we talk about it being created by artificial intelligence. These systems are developed to generate images using a textual description. At the heart of generators is a complex process in which artificial intelligence analyzes and understands text context. The AI then uses vast databases of images and artistic styles to create unique artwork that matches the text description. These AI generators are extremely diverse in capabilities and can operate on a scale ranging from simple graphics to complex, high-resolution, human-like creations. They cover a wide spectrum of application possibilities, from helping designers with their creative blocks to helping marketers create visual content, and even allowing businesses to bring their imaginative concepts to life without involving creative professionals. (AWAN, 2021).

1   Literature summary

Many studies have addressed the practical benefits of artificial intelligence in the field of marketing, including Davenport (2018) in "Artificial intelligence for the real world". in his work, he writes that more and more people are using AI in the business sphere, however, in order to achieve success with it, companies need to understand exactly what types of tasks artificial intelligence can solve. It highlights that in some cognitive projects 80% of the decisions will be made by the machine and 20% by the human, but there are workflows where this decision rate is reversed. The redesign of work, if companies consider the possibilities of cognitive technology, can have many advantages, especially in understanding the consumer, satisfying end-user needs and having a positive effect on the reorganization of work. (DAVENPORT, 2018)

In several of Kumar's studies, including "Influence of new-age technologies on marketing", c. wrote about marketing-based approaches to artificial intelligence. Based on

interviews with managers, he evaluated which technologies are the most important for companies - including AI - and in which areas they believe that the system can benefit the company. From the answers of those interviewed, it became clear that artificial intelligence is of the greatest help to the company in the production of suitable content, and algorithms can predict the future behavior of customers with a higher percentage. (KUMAR, 2020) Vlačić's study "The evolving role of artificial intelligence in marketing" proved to be a comprehensive source, in which he collects and evaluates the literature that focuses on the intersection of artificial intelligence and marketing. The listed studies are characterized by a holistic, technology-related theoretical, ethical, expert and citation-based methodological approach. (DEVANG, 2019) Several English-language literatures on the evaluation of the impact of artificial intelligence on marketing has been published, including: Hadi et. al (2019) analyzes digital advertisements in his research, in which three variables: "number of clicks, number of impressions and the click-through rate." (HADI et.al, 2019: 43) It concludes that the optimized algorithm can improve the density and relevance of advertising. This can be done in two ways: if "the keywords searched by users are not relevant, then more relevant keywords can be added to the program, and if the keywords searched by users are not relevant, then the keywords can be changed or fine-tuned to be more specific". (HADI et.al, 2019:47) Hildebrand (2019) points out that we use artificial intelligence much more often than we are aware of. According to Hildebrand's study, artificial intelligence is more than a simple technology and can create an economy operating on a new basis. Jarek - Mazurek (2019) proves through collected examples that artificial intelligence affects all elements of the marketing mix, Jones's (2018) writing focuses on understanding the use and impact of virtual assistants, according to which marketers' attention is shifting from the product to the audience. For him, the big question is whether we understand these new types of customers. (JONES, 2018)

A wide range of English-language literature talks about the imaging processes of artificial intelligence, which help to understand the creation of the image, among which the most prominent is the writing of Elkhova and Kudryashev, in which "it deals with the philosophical analysis of the creative process of systems with artificial intelligence". (ELKHOVA et.al 2017:135) There have been different positions regarding the creative abilities of artificial intelligence. Goodman's writing is that "No one in the art world really considers AI an artist." (GOODMAN, 2020), but the German artist Klingemann has the same opinion: AI is "horrible art from an aesthetic point of view. You have to put some work into it to call it art." (FLYNN, 2018) This is in stark contrast to the statement of Caselles-Dupré, Fautrel and Vernier, who focused on discovering the relationship between creation and artificial

intelligence during the GAN or 'generative adversarial network' program. (CHRISTIES, 2018). Oksanen deals with the role and possibilities of AI in the cultural sector, with what kind of tool it can be used for, e.g. when organizing an art event, or whether works created by AI can be perceived as art. Among other things, the experiment also revealed that the participants began to devalue works of art after it was revealed that they were created with the help of AI. In his study, he concludes that "the practical applications of AI in the field of art are vast and include the production, distribution and consumption of art." (OKSANEN et. al, 2023:9)

2 Methodology

For our exploratory research, we chose the qualitative methodology, we conducted 10 in-depth interviews in Hungarian, and we raised questions such as how much the pandemic has to do with the digital breakthrough of contemporary art, how much the use of artificial intelligence can be considered an expectation in organizational behavior in Hungary and Slovakia in the field of culture, how much impact of digitalism on the consumption of art products. We expanded the questions in a broader sense, and we were also interested in what professionals think about the development of technology in the art world, what connections they see between art marketing and the use of artificial intelligence. What do experts from the two countries concerned think about whether the image produced by the algorithm can be considered a work of art.

We turned our questions into a structured set of questions. Our method captured the nuanced details of subjective experiences, perspectives, and contexts. The interviewees included a curator, art historian, patron, head of institute, head of design studio, multimedia artist, and restorer. The subjects were selected using the snowball method. It was an important aspect that the interview should take place between professionals and professionally credible artists who are actively active in contemporary fine arts life.

During the in-depth interview, we properly informed the research participants about the objectives of the research, its nature, and the use of the extracted data. We assured them that participating in the research posed minimal risk to them, guaranteed their anonymity, and ensured data protection. We considered the criteria of social responsibility, so that the survey does not cause any negative effects to the participants or the wider community. During the in-depth interview, we tried to create conditions where the participants could answer the structured questions honestly and without limitations.

3   Results

Three contemporary artists, a patron, the head of an architectural studio, a restorer, a media design specialist and three art historians participated in the research. Of these, four are active in Slovakia and six in Hungary.

Tab. 1: Demographic distribution among the interviewees

Field of expertise	GENDER	ERA	COUNTRY
Contemporary artist	male	25-35	Hungary
Contermporary artist	female	25-35	Hungary
Contemporary artist	female	35-45	Slovakia
Patron	male	60-80	Slovakia
Architectural studio manager	male	34-45	Slovakia
Restaurateur	male	35-45	Hungary
Media designer	male	35-45	Slovakia
Art historian	male	35-45	Hungary
Art historian	female	35-45	Hungary
Art historian	female	35-45	Slovakia

Source: own editing

During the research, we were primarily interested in the extent to which it is expected in Hungary and Slovakia today that the staff of art institutions have knowledge about the use of AI. All of the interviewees stated that this is not currently a basic requirement in contemporary regional art life, and the technical equipment is not adequate for the galleries in the region to be able to present art works generated with different software. The artists stated that they often have to provide the technical equipment in order to be able to present their digital works.

The art historians and the media planning specialist drew attention to the fact that the relevance of the data must be viewed critically, and that artists best deal with the issues of AI and ethical and legal regulation with the utmost importance. According to their knowledge, there is currently no unified decision in the European Union for the use of AI-taught images, or they are not aware of it.

The art patron, the head of the architecture studio and the restorer did not see a strong connection between the pandemic and the advance of AI. According to the art historians and

the two multimedia artists, the application of AI in the creative sector did not follow from one another, but they influenced each other. The development of AI is not a consequence of the pandemic, however, the pandemic acted as an incentive for more and more artists to try it out, even on an experimental basis, so it was able to spread in a short time in the world of contemporary fine art. The media design expert thought he discovered close connections between the pandemic and the advance of AI, according to him, the number of artists and professionals who started using artificial intelligence in the profession, even on an experimental basis, has apparently increased.

Tab. 2: Illustration of the extracted data with infographics

Source: own editing

Those interviewed expressed a unanimous opinion that currently those active in the contemporary art world regularly monitor social media platforms in order to follow the works of visual artists or to get to know new visual artists. Five of the interviewees elaborated on the
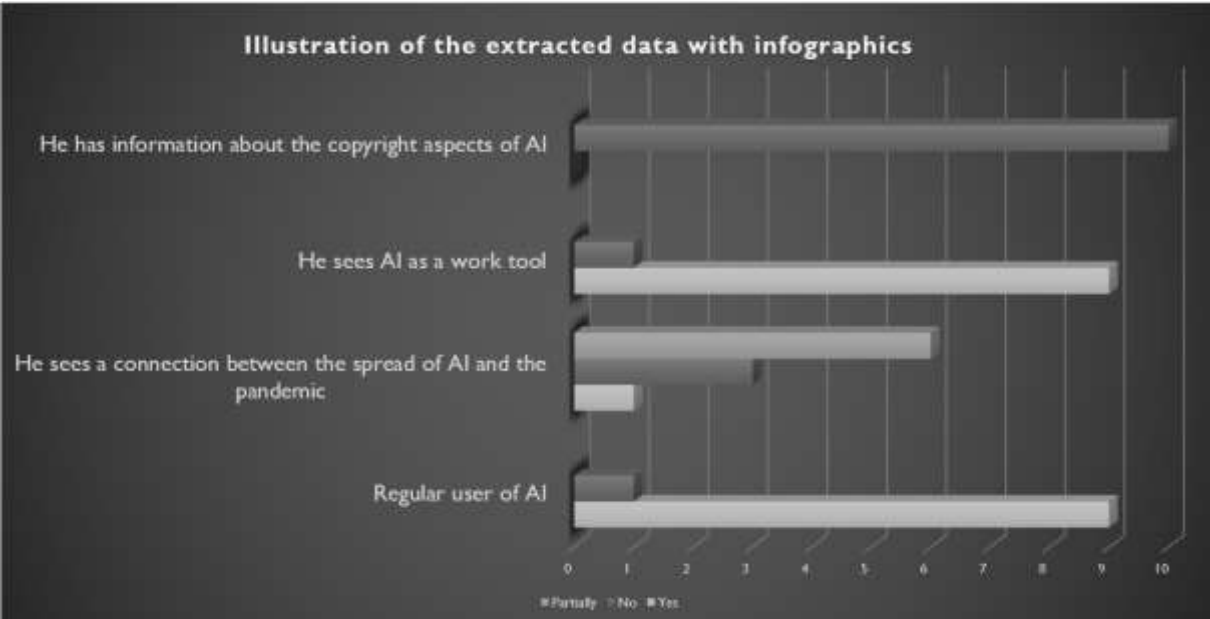
importance of social media platforms in contemporary art. One person thought that websites are becoming outdated because they are difficult to manage and take time to update, unlike an Instagram profile. Two of the multimedia artists stated that they or other artists they know have already been contacted through their Instagram profiles, and they even personally know artists who adjust the dimensions of their artworks to the Instagram image gallery before starting the work, so that it is visually compatible when photographed in its finished state. be with your platform.

From the interviewed subjects, 9 unanimous answers were received that the presence on social media can launch an artistic career, however, there were already conflicting answers as

to whether the social media interface alone can make the artist successful. Seven of them believed that social media cannot in any case make the artist recognized and successful in the long term. In order to be recognized, it is necessary to enter the artistic canon that shapes taste and has significance, because a young up-and-coming artist will be recognized by institutions and persons capable of canonization.

Conclusion

The AI imaging process has many advantages, including efficiency, creativity, personalization, and accessibility. Such programs can quickly and efficiently create images based on textual descriptions, saving time, cost and resources compared to traditional image creation methods such as manual graphic design or photography. They can interpret and visualize abstract or complex concepts that would be difficult or time-consuming for artists to render. This can potentially push the boundaries of creativity and art. AI images can democratize access to visual content to create unique visual content. However, the creative industry also faces a number of challenges when it comes to the imaging possibilities of artificial intelligence. Among them are unpredictability, the issue of intellectual property, and content moderation. The programs generate images based on a set of images already available on the Internet, so copyright concerns may arise. "Generators can also create images that violate other people's rights or may be harmful to minors if not properly moderated." (Awan, 2021) "These tools not only change the way visual content is created, but also push the boundaries of AI's creative potential, blurring the lines between technology and art." (McFarland-Tardif, 2024)

Based on the data obtained from the interviews, the following conclusions can be drawn regarding the two countries examined:

(a) It can be said that creative professionals are aware of the possibilities of using artificial intelligence in their field of expertise.

(b) There is currently no conscious marketing strategy use of artificial intelligence in contemporary art institutions.

(c) The online representation of the artist is becoming increasingly important.

(d) The interviewees in both countries see AI as a potential work tool, but their visions or fears about it are not known.

(e) Creators and curators are characterized by uncertainty regarding copyright in the field of image, video, and text creation. Various positions are typical.

(f) Social media, although it can launch an artistic career and make an artist recognized, it cannot take over the role of professional canon institutions.

The results of the research can encourage contemporary galleries so that their employees are just as aware of digital trends as their artists and can apply them at the institutional level.

Art marketing professionals may look to the source of artificial intelligence as a valuable tool in the future. It can be effective not only in text creation and data collection, but it can also collect information about the public's visits to the cultural institution and optimize the visitation of the exhibition. At the same time, the spread of the use of artificial intelligence in the creative industry raises a series of fine art problems for which the Hungarian art scene is not currently prepared. Among them, the solution of ethical dilemmas is urgent, but the question of devaluation of works of art considered traditional, designed for the offline space, made exclusively with manual tools, may also put pressure on the profession in a brief time. And the exhibition designers of the institutions must prepare even more for the transformation of the reception experience. In addition, we must not forget that the use of artificial intelligence and other digital software can make the recipient vulnerable and lead to a sense of disappointment in the viewer, which can cause confusion at the level of perception. In the future, it will be important for institutions to prepare for the presentation of digital works of art and to be able to represent their artists in the offline space.

Our further research steps include increasing the number of interviewees in the qualitative research phase to 15-20 people in both countries. In the future, we plan to expand the current phase with quantitative research, where we aim to compile a questionnaire consisting of 25-50 closed, standardized questions. In the series of questions, we would ask about the answers given in the interviews in greater detail. We are targeting the art universities, cultural institutes, museums, and galleries of the two countries to achieve the appropriate occupancy rate.

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