Development of the art market in Ukraine: towards the competitiveness of Ukrainian artists under the conditions of informatization of society

Abstract
The aim of the article is to analyze the key features of the modern art market in the context of the digitalization of art, as well as to study the potential for further development and dissemination of online trade in art. The study concluded that the Internet and cyberspace provide new opportunities for artists to make the global art trade more universal and efficient, and for artists themselves to be more competitive in the art market. The scientific novelty lies in the fact that the authors highlight the issue of digitalization of the contemporary art market and the impact of this phenomenon on the formation of the competitiveness of Ukrainian artists in these conditions. The practical significance of the study is that the authors analyzed and highlighted the most significant changes in the art market in Ukraine under the influence of digital technologies that affect the competitiveness of domestic artists. The authors

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Розвиток арт-ринку в Україні: до питання формування конкурентоспроможності українських митців в умовах інформатизації суспільства

Анотація
Метою статті є аналіз ключових особливостей сучасного арт-ринку в умовах цифровізації мистецтва, а також дослідження потенціалу подальшого розвитку та поширення онлайн-торгівлі предметами мистецтва. Результатом дослідження став висновок про те, що інтернет і кіберпростір надає нові можливості для митців, які спрямовані на те, щоб зробити глобальну торговлю предметами мистецтва більш універсальною та ефективною, а самих митців більш конкурентоспроможними на арт-ринку. Наукова новизна полягає у тому, що у статті авторами висвітлено питання цифровізації ринку сучасного мистецтва та вплив цього явища на формування конкурентоспроможності українських митців в зазначених умовах. Практичне значення дослідження полягає у тому, що авторами було проаналізовано та виокремлено найбільш істотні зміни в арт-ринку в Україні під впливом

1 Doctor of Art History, Professor of the Department of Theory and History of Art Kharkiv State Academy of Design and Fine Arts, Faculty of Fine Art, Kharkiv Region, Ukraine.  
2 PhD in Art History Associate Professor in the Department of Fine Arts and Design Faculty of Ukrainian and Foreign Philology and Art History Oles Honchar Dnipro National University Haharina, Dnipro, Ukraine.  
3 PhD in Art History, Associate Professor in the Department of Fine Arts and Design Faculty of Ukrainian and Foreign Philology and Art History Oles Honchar Dnipro National University Haharina, Dnipro, Ukraine.  
4 Candidate of Study of Art Senior teacher of Department of Painting Kharkiv State Academy of Design and Fine Arts, Faculty of Fine Art, Department of Painting Art Street, Kharkiv Region, Ukraine.  
5 Candidate of Art History, Associate Professor Kharkiv State Academy of Design and Fine Arts, Faculty of Audiovisual Arts, Department of Audiovisual Arts, Kharkiv Region, Ukraine.
emphasize that the modern world market of art objects is actively developing and is reformed through the introduction of modern digital technologies, remains reliable for investment. The authors note that the market of works of art, as a significant part of world culture, in which such a social and cultural phenomenon as the art market, is a system of relations between creators, distributors (dealers, art consultants), and consumers of artistic products, are realized through commodity-money relations, and the biggest obstacle to the further growth of the art industry is the lack of trust between the parties to the agreements and their transparency in the art market.

**Keywords:** art market, digitalization, investment activity, trade, economy.

**Introduction**

The investment market in any sphere is a complex system in which the main function is to balance the interests of buyers and sellers. This system is usually defined as a set of the legislative environment, trade and settlement infrastructure, as well as the information field. Investment markets combine government regulation to define clear rules, tax regime and information disclosure, self-government to organize trade and settlement, and private initiative to conduct the entrepreneurial activity.

It is clear that the more effectively the market is adapted to the economic and social challenges, the lower will be the transaction costs of its participants and the fate of the commercial benefits of intermediaries, at the same time with greater benefits for investors and issuers carrying out their activities in the market of investment objects. An effective investment market enables its participants to focus more attention on new ideas of more precise forecasting of investment objects’ value dynamics (accordingly, evaluation of investment profitability in these objects) as well as on new methods of elimination or minimization of investment process risks. Unlike the market of, for example, securities, real estate, the market of art objects is slow in its development because of its closedness, caste, and seasonality. However, despite this fact, the art market has significant potential as well as an excellent alternative for the deposit of free capital for investment income.

The modern period of development of the world economy can be characterized by the rapid development of the art market. Demand for art objects is growing among both buyers in Ukraine and abroad, the infrastructure of the art market is growing and developing, and along with it the interest in it as a profitable field of investment. Economic crises in recent decades have shown that investing in art is a real possibility for saving and increasing capital, as opposed to real estate and luxury goods, which have fallen in value during the crisis periods. At the same time, under the influence of digitalization, there is an institutional change in promotion strategies and, just as importantly, in motives for acquiring art.

The development of information and communication technologies fuels the digital economy, accelerating the pace of production, delivery, and consumption of goods and services. The Internet has touched every economic sphere, and artwork and the art market are no exception. New technologies are gradually leading to a paradigm shift in the trading and brokering of art objects in the marketplace and are stimulating new structures for art enterprises that are supported by new interdependencies between art, technology, and commerce.
The aim of the article is to analyze the key features of the modern art market of Ukraine in the context of digitalization of art, as well as to study the potential for further development and spread of online trade in art in our country.

Theoretical Framework or Literature Review

Scholarly studies of the art market depend on financial statements and legal documents. One of the first books on the history of art markets, Gerald Reitlinger's trilogy The Economics of Taste, was published back in 1961 (Reitlinger, 1961). However, it should be noted that most of the deals and transactions in the art market still take place without the use of modern technology, accordingly, both domestic and foreign researchers have not paid enough attention to the phenomenon of the Internet as a powerful innovation in the market. art, and consider cyberspace as a simple auxiliary tool that can be used to increase sales of works of art. According to the above, the main problem is that due to the academic novelty of the topic in question, one has to deal with a lack of statistical data, which makes it very difficult to develop a comprehensive retrospective narrative.

Analysis of existing studies on the impact of digitalization on the art market (instant access to a full amount of information about the product, the absence of unnecessary contacts and unwanted questions, saving time on the transaction and the subsequent delivery of the purchased goods, etc.) leads to the conclusion about the semantic and methodological changes of the modern art market.

Most art market practitioners are inclined to believe that digital art has become part of everyday life and strongly influences traditional art in its current phase (Schukei, 2019; Sanders, 2018), along with the fact that many digital artists have begun to explore traditional art. Some scholars draw attention to the advantage of the economic relationship emerging in the art marketplace: newcomers to the online art marketplace should recognize that the intention of users to use an online art platform is determined not only by the technological usefulness of the website but also by the symbolic capital of the information provider (Lee & Lee, 2019). Other scholars focus on the composition and functional orientation of the online segment of the contemporary art market, highlighting three of the most prominent cyber phenomena that could have a huge impact on the further development of the global online art trade (Sidorova, 2019). Some scholars focus on exploring the analysis of the main characteristics and problems of digital art in a general sense, as well as the solutions and problems offered by cryptographic certificates in all aspects of artwork life: production, distribution, and preservation (Cuesta Valera et al., 2021).

Methodology

Multidimensionality of the research purpose is dictated by the search of economic instruments to optimize the art market in Ukraine in the formation of competitiveness of Ukrainian artists in terms of informatization of society. For cognition of economic phenomena and actions are carried out special researches, the process of research using certain ways of the essence of the phenomena for the purpose of optimum organization of purposeful activity of people in one or another sphere of production. The subject of economic research are social phenomena and processes in the production of material goods.

When carrying out the research on the topic the authors used general scientific methods, such as analysis, synthesis, induction, deduction, analogy, modeling, abstraction, concretization. The authors also used specific methods of research, which are used by economic sciences for cognition of the essence of phenomena and processes: calculation-constructive and abstract-logical.

Results

The art market as a significant part of world culture in which such social and cultural phenomenon as the art market acts as a system of relations between creators, distributors (dealers, art consultants), and consumers of products of art culture, realized through commodity-money relations. In other words, we can conclude that the art market in its essence is a set of art-cultural and economic relations in the form of equivalent exchange of various art objects for material values, in which economic agents are the creators of works of art, buyers and intermediaries between them. The economy with implemented information and communication technologies is a digital economy based on digital technologies, more properly characterizing the field of electronic goods and services.

The contemporary art market in the context of informatization is an autonomous segment of the contemporary art market, offering alternative ways of buying and selling works of art. The online art market has two important differences

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from the offline market: firstly, due to its ability to spread information about art and artists instantly and worldwide, an art market connected to the Internet can reach many new buyers and enormously expand the market. Second, virtual cyberspace exists across national and continental borders, and an online art marketplace can be accessible to any number of sellers around the world, while being represented on only one site, making it accessible to more potential buyers, who purchase art directly from home.

The Internet has evolved from an art marketing tool into an art market with its unique features and developmental patterns. Estimating the size of today’s online art market is difficult, as is predicting the future of online art markets, although it is clear that online platforms have become increasingly important over the past decade.

On the example of the sales of paintings, we can determine the overall performance of the market:

- **the capitalization of the investment-quality art market**, which can be calculated as the aggregate value of all the artworks included in a particular sample;
- **the average value for the most valuable artworks** is calculated as the average value from the list of selected artworks;
- **the marginal price**, which corresponds to the value of the last artwork in the emerging ranking;
- **market breadth index** - the number of artists included in the rating;
- **market depth index** - turnover over the past 12 months as a percentage of market capitalization. Turnover is calculated as the total value of all-new artwork, which is included in the ranking over the past 12 months;
- **resale index** - this indicator reflects the turnover of the most significant artworks on the open market and is calculated as the number of resales of paintings from the rating in the last 10 years as a percentage of 1 thousand;
- **the average annual yield** is calculated as the changes in market capitalization over the relevant period, reduced to a percentage per annum.

In the practical activity of analyzing the market of investment-quality art objects the segmentation of the paintings selected for analysis is carried out. Based on this the indicators of the art market of the second level are calculated, to which we refer:

- **the market capitalization of individual artists**, which is calculated as the aggregate value of all the artworks of a given artist on the selected list, both in nominal and real value;
- **index “yield” of historical periods**, which is calculated as the total market value of the artworks included in the selected list and were created during a certain period.

The contemporary art market has not only a certain geographical structure, given the fact that the United States, China, and Britain are leaders in sales in the art segment, but also a typological segmentation. Among all the participants in the art trade market, the most influential are the auction houses, which are the instruments of influence that determine the main directions of further economization of art and increase the competitiveness of artists. One of the branches of the contemporary art business, which is the most dynamically developing at the present stage in Ukraine and in the world, is internet trade (internet auctions). However, there is a certain amount of distrust in the reliability of such online auctions, both among large auction houses, such as Sotheby's or Christie's, and among buyers, which is related to the quality of artworks (paintings, sculptures) which are on sale, their originality, as well as the seller's reputation.

**Discussion**

The ongoing processes of informatization affect not only the economy but also directly on the person, a key component of an effective and safe life becomes free possession of digital and information-analytical technologies, through which the person receives the amount of information that produces (within its adequacy) and abilities) its assessment and builds a model of their social behavior. Digital art requires no less skill than traditional artmaking, but it does require a different mode of thinking (Schukei, 2019). Creating brushes, shapes, and patterns for your program gives you flexibility in what you can do with your artwork, and it gives you the possibility of earning extra money from those unique creations (Sanders, 2018). User participation in the online art market is guided by curatorial direction rather than social influence (Lee & Lee, 2019). The behavior of an art purchaser is quite often characterized by a high percentage of subjectivity and irrationality in the decision to purchase a particular art asset. This has negative consequences, first and foremost, for the buyer himself, especially during a financial crisis, during which investment decisions must be balanced and rational.
In the art objects market in Ukraine, as in any other investment market, we can distinguish two general types of participants, depending on which business model they use: auction trading, financial services, information business, or dealer business (including private museums and galleries). Most of them are public, private, and professional investors pursuing all possible investments, including collecting strategies in the art market. The second category is institutions, organizations, and individuals that serve the art investment process and represent the infrastructure of the art market.

Digital technology, which appeared in the ’80s and consolidated itself in the following decade with what was called the “third industrial revolution”, has transformed not only our daily environment but also the way in which we produce and experience artistic work (Cuesta Valera et al., 2021). The contemporary art market is a complex and multifunctional phenomenon. The transition to a market economy entails active commercialization of art, the formation of new relationships between creators of works and their admirers as well as buyers of their works. The growing interest of the world’s economies in the art trade is evident, as well as the benefits of being active in the art market.

The art market is often mistakenly referred to as a completely unregulated market, which is certainly not true in any way. In world practice, there are many rules, in particular on auction sales, that regulate buyers’ rights and ensure their protection. Digital artwork made recent highlights with the integration of the cryptocurrency market that already tops 2 trillion and is still rising dramatically (Wang & Wang, 2021). Nevertheless, it must be recognized that compared to much larger markets, such as the stock market, which has strict rules, for example concerning insider trading or market manipulation, the art market, that is, art trading, takes place in a much less regulated environment.

It should also be noted such a feature of the global art market as a tendency to the anonymity of transactions, in contrast to the usual business transactions in other sectors, such as real estate. But when someone sells an artwork at auction - even something worth $100 million, much more than your house - the identity is typically concealed (Bowley & Rashbaum, 2017).

When works of art are in market circulation, they acquire a commodity character. The art market, both in Ukraine and all over the world, is subject to the trends that exist in the world economy, among the most important ones one should highlight the globalization of the art market, the development of various ties between states in the field of culture, as well as the increasing role of information technology and the development of online commerce.

The widespread usage of digital formats and techniques in the production and presentation of artworks has made contemporary art practices more accessible and thus open to being experienced (Selen et al., 2022). The modern online art market has its own structure, in which we can distinguish hybrid online-offline-art-businesses, as well as online art enterprises. Online-offline companies present in today’s online art market are traditional primary (galleries) and secondary (auction houses) participants in the art market, operating both online and offline. They use cyberspace to increase sales and create new marketing channels. There are three main types of online art enterprises currently functioning in the art market: online auctions, online galleries, and the online marketplace (Sidorova, 2019). Internet auctions (e.g., Auctionata, Saatchiart) allow buyers to purchase art immediately at the click of a button. They are the starting point for new art collectors and, unlike dealers, auction houses post prices publicly (Buchholz et al., 2020). Online shopping platforms (1stdibs, Artnet, Artsy, Artnetcollect, Artviation, Saatchiart) allow buyers to purchase art immediately at the click of a button. They are the starting point for new art collectors and, unlike online auctions, provide direct communication between artists, art dealers, and potential buyers. It is art in cyberspace and the art market under the influence of digitalization that is becoming complex and multi-structured. With the advent of computer technology and communication technologies, areas such as computer graphics, computer, and digital design, and phenomena...
such as digital art have emerged (Osadcha, & Baluta, 2021).

The creation and presentation of art become cultural phenomena. While social needs determine the development of technology, innovations, and differences in production arise in all areas of life (Aydoğan, 2019). Whether it is digital art or traditional art they are both art. The differences between the two are the media you use (Gupta, 2019).

The number of publicly-traded art companies is small, and information on the profits and expenses of the participants that are the infrastructure of the art market is, in most cases, classified information, and therefore of little use for comparison. In general, the art market does not have a single geographical location. For example, digital art in public places is part of the city’s creative infrastructure as well as of the space of places; it is a weak location factor, it influences people’s information behavior, and it has effects on the city’s knowledge-based and creative economy (Littwin & Stock, 2020).

Most transactions are made and conducted directly between the owners of paintings and sculptures or through professional art dealers. A significant part of art asset trading activity, in one way or another, is associated with major art exhibitions taking place all over the world, but it should be noted that these exhibitions do not perform the function of organized and permanent markets that can eliminate counterparty risk and ensure liquidity and constant formation of the market price of art assets. We can state that the function of organized markets is attempted by large auction houses, which, unlike exhibitions, have a permanent location, hold auctions throughout the year, act as a clearinghouse, eliminate counterparty risk, and also eliminate the risk of counterfeiting art objects.

Factors affecting the art market can be divided into internal and external. To the internal, we can include factors, which in turn are indicators (indicators) of segments of the art market. These indicators can be divided into general and second-tier indicators. To the external factors, we can refer the main indicators of the macroeconomic situation in the world, we are talking about global world indices, indices of national markets, price of gold, silver, platinum, and oil. The aim of key indicators of the investment segment of the art objects market is the most objective reflection of the current tendency of price dynamics and liquidity of the public market of the most expensive art objects.

These key indicators allow estimating the market composition (structure of market capitalization by sectors by analogy with the stock market analysis), distribution of value, trading volume, and growth rate of value by types of art objects.

Conclusions

Based on our study, we can identify the most significant changes in the art market in Ukraine under the influence of digital technology, which affect the competitiveness of artists in Ukraine:

- information about auctions and dealer sales, including the advertising component, is publicly available and freely posted on the Internet in its entirety, which attracts a large number of new buyers;
- the digitalization of all stages of communication between the participants (communication via e-mail, payment for the agreement itself, and related costs);
- the creators themselves (artists, sculptors, and others) actively promote their products through accounts on social networks and on official websites;
- significant democratization of the art market, both in terms of the composition of participants and the range of items offered for purchase and sale.

Due to the dramatic growth of the volume of the art (work) market and the increase in the number of its participants, digital technologies should resolve the key problems of the art market - issues of trust and transparency of transactions, which create the greatest obstacles to further growth of the art industry.

As can be seen from the above, the global art market is beginning a process of reform and new rules are seen as a necessary reform of the industry, which requires stricter regulation and increased transparency.

To summarize the above, we can conclude that despite changing international relations and the global environment as a whole, the art market in the era of digitalization has become a single global space. We believe that today's global art market is actively developing and reforming due to the introduction of modern digital technology, so it remains competitive and reliable for investment.

Bibliographic references

Aydoğan, D. (2019). Reflections of digitalization on painting. The Turkish Online Journal of


