

THE ECONOMIC SIGNIFICANCE OF DESIGN COMPANIES' ACTIVITIES IN FORMING A MODERN MUSEUM EXHIBITION



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Annotatsiya. Maqolada dizayn kompaniyalarining zamonaviy muzey ekspozitsiyalarini yaratishdagi iqtisodiy ahamiyati va ularning muzey sohasiga qo‘shayotgan qo‘shilgan qiymati tahlil qilinadi. “Immersiv dizayn”, “raqamli hikoyalash” hamda “tajriba iqtisodiyoti” kabi innovatsion yondashuvlar asosida shakllanayotgan yangi bozor mexanizmlari ko‘rib chiqiladi. Tahlil 2018–2024 yillar davomida jahon muzeylari (Luvr, Britaniya muzeyi, Smitson instituti, Reyksmyuzem, Ermitaj, Qatar Milliy muzeyi va boshqalar) bilan dizayn kompaniyalari hamkorligi natijasida shakllangan tashrif buyuruvchilar oqimi, daromad va samaradorlik ko‘rsatkichlariga asoslanadi.

Kalit so‘zlar: zamonaviy muzey ekspozitsiyasi, dizayn kompaniyalari, immersiv dizayn, raqamli meros, AR/VR texnologiyalari, tajriba iqtisodiyoti, interaktiv ko‘rgazma, tashrif buyuruvchi tajribasi, muzey iqtisodiyoti, iqtisodiy samaradorlik.

Abstract. The article analyzes the economic significance of the activities of design companies in creating modern museum exhibitions, the added value they bring to the museum industry, “immersive design,” “digital storytelling,” The new market mechanisms emerging based on innovative approaches such as “immersive design,” “digital storytelling,” and the “experience economy” are analyzed. The analysis is based on visitor traffic, revenue, and efficiency metrics from collaborations with design firms for world museums (Louvre, British Museum, Smithsonian, Rijksmuseum, Hermitage, National Museum of Qatar, etc.) from 2018 to 2024.

Keywords: modern museum exhibition, design firms, immersive design, digital heritage, AR/VR technologies, experience economy, interactive exhibition, visitor experience, museum economics, economic efficiency.

Аннотация. В статье анализируется экономическое значение деятельности дизайн-компаний в создании современных музейных экспозиций и их вклад в формирование добавленной стоимости в музейной индустрии. Рассматриваются новые рыночные механизмы, формирующиеся на основе инновационных подходов, таких как «иммерсивный дизайн», «цифровой сторителлинг» и «экономика впечатлений». Анализ основан на показателях посещаемости, доходов и эффективности сотрудничества с дизайн-фирмами ведущих мировых музеев (Лувр, Британский музей, Смитсоновский институт, Рейксмузеум, Эрмитаж, Национальный музей Катара и др.) за 2018–2024 годы.

Ключевые слова: современная музейная экспозиция, дизайн-компании, иммерсивный дизайн, цифровое наследие, технологии AR/VR, экономика впечатлений,

интерактивная выставка, опыт посетителя, экономика музеев, экономическая эффективность.

Introduction. In the 21st century, museums are undergoing a transformation, moving beyond their traditional role as institutions of static exhibits to become multifaceted cultural, educational, and economic spaces. According to UNESCO, the number of museums worldwide has increased by 48 percent over the last decade, and their economic ecosystem includes the tourism industry, the creative economy, information and communication technologies, and professional design services.[3] In the modern museum economy, design firms play a particularly important role, this is because, according to global research on visitor behavior, nearly 63 percent of the museum experience depends on the quality of visual expression, interactive technologies, and exhibition design.[7] Additionally, immersive design solutions have been shown to increase visitor numbers by 40 to 120 percent in exhibitions [3], The economic effectiveness of digital exhibitions is scientifically proven to be an average of 2.3 times higher than that of traditional exhibitions. As a result, museum projects created by leading international design studios such as BRC Imagination Arts, Local Projects, Event Communications, and Gallagher & Associates are generating billions of dollars in economic value and setting new standards of competition in the global museum market.

BRC Imagination Arts is a U.S.-based experiential design studio specializing in the creation of immersive exhibitions for museums, theme parks, and cultural institutions. The company's projects place strong emphasis on storytelling, spatial dramaturgy, and the emotional engagement of visitors as core components of the design process.

Rather than treating the museum as a space merely to be observed, BRC seeks to transform it into an environment that is actively experienced and personally felt. Practical observations indicate that institutions redesigned by BRC have recorded increases in visitor attendance as well as noticeable growth in revenue generated from auxiliary services. This approach represents a practical application of the principles of the experience economy within the framework of contemporary museum economics.

Local Projects is internationally recognized as one of the leading studios specializing in the creation of interactive and digital environments. In designing exhibitions, the company extensively employs touch-screen interfaces, media installations, data visualization tools, and technologies that actively involve users in the interpretive process.

Such an approach transforms visitors from passive observers into active participants. As a result, the average duration of visits tends to increase, younger audiences are more effectively engaged, and opportunities for monetizing digital services expand. This, in turn, supports service diversification and contributes to the overall economic sustainability of museum institutions

Founded in the United Kingdom, Event Communications is widely recognized for its integrated approach to museum architecture and exhibition design. The company combines visual composition, lighting strategies, color psychology, and spatial navigation systems with a clear focus on economic performance.

In projects delivered by the company, the careful organization of exhibition flow optimizes visitor movement throughout the space. This strategic circulation planning naturally guides visitors toward retail areas and auxiliary service zones, thereby increasing commercial engagement and overall revenue turnover.

Gallagher & Associates is recognized as one of the leading firms in strategic master planning and the design of large-scale museum and cultural complexes. The company develops

design solutions in close integration with institutional business models, ensuring that spatial and conceptual strategies align with long-term financial objectives.

Within its conceptual framework, the exhibition is viewed not only as a vehicle for scholarly communication but also as an economic asset. Branding strategies, merchandising systems, visitor flow management, and the placement of service areas are planned in a systematic and coordinated manner. This integrated approach supports the long-term financial sustainability and operational resilience of museum institutions.

This article systematically analyzes the economic role of design firms in the process of shaping contemporary museum exhibitions. This article aims to scientifically determine the impact of design firms' activities on the formation of modern museum exhibitions, and on visitor flow, revenue structure, and the effectiveness of their integration with the creative industries.

Literature Review. The scholarly literature on shaping modern museum exhibitions interprets museums as cultural-economic institutions operating on the basis of the experience economy. In the experience economy theory developed by Pine and Gilmore, it is emphasized that the visual, emotional, and immersive experience offered to the visitor is the museum's primary economic product. [9] Linking this approach to the ideas of Falk and Dierking's "Contextual Model of Learning" [4], it is noted that contemporary museum design enhances economic efficiency by strengthening visitors' cognitive engagement. Additionally, Hooper-Greenhill [5], Research by museologists such as Black and Lord & Piacente scientifically demonstrates that design services are of primary importance in interactivity, visual communication, exhibition dramaturgy, and mechanisms for managing visitor behavior. [1] In the field of Digital Heritage, Smith, In studies by Smith, Parry, and Cameron & Kenderdine on Digital Heritage, AR/VR technologies, 3D reconstruction, sensory modules, and immersive media are evaluated as strategic innovations that ensure the sustainability of the museum economy.

Economic evaluations by international organizations and major museums reveal the real economic results of design companies' activities. The Creative Europe report shows that in museums collaborating with design and creative media studios, the economic added value increased by 1.8 times, Museum Next surveys have scientifically proven that quality metrics for visitor experience improved by 35–70% in galleries that used immersive design. [7] Additionally, official economic reports from museums such as the Louvre, the British Museum, the Rijksmuseum (2020), and the Qatar National Museum show that new exhibitions developed by design studios result in a significant increase in souvenir sales, tour services, digital content monetization, and overall visitor numbers. For example, the Qatar National Museum's design concept had a multiplier effect on the economy of over \$220 million. This literature confirms that the economic model of museums is deeply integrated with the activities of design firms, and that design quality is a factor that directly impacts visitor flow, brand value, and service market revenues.

Methodology. The study was conducted using a combination of scientific and methodological approaches aimed at determining the economic impact of design firms' activities in the process of shaping modern museum exhibitions. First, using the comparative analysis method, the design solutions employed by leading global museums such as the Louvre, the Qatar National Museum, the Smithsonian, and the Hermitage were compared with the practices of museums in Uzbekistan. According to the expert evaluation results, the majority of the 20 surveyed museum directors and design professionals (over 80%) emphasized that exhibition quality, multimedia integration, and immersive technologies contribute to:

- increasing visitor numbers;

- expanding ticket sales revenue;
- boosting turnover from souvenirs and auxiliary services;
- generating additional income through digital services.

The SWOT analysis identified creative approaches, brand image development, and compliance with international design standards as key strengths of collaboration with design firms. The main weaknesses were associated with high initial investment costs and ongoing technical maintenance expenses.

The PEST analysis confirmed that economic stability, tourism flow, the level of digital transformation, and state cultural policy significantly influence museum economics.

Empirical observations conducted in museums in Tashkent, Samarkand, and Bukhara demonstrated that following the modernization of exhibition design:

- visitor flow increased on average by 20–35%;
- ticket revenue showed consistent growth;
- additional monetization channels were established through souvenir sales and interactive services.

Content analysis of annual reports from leading international museums further revealed a direct correlation between design quality and economic performance. In particular, immersive exhibitions tend to extend visitors' dwell time within museum spaces, which in turn increases consumption of services.

Overall, the findings substantiate that the activities of design firms not only enhance the artistic and aesthetic environment of museums but also strengthen their economic sustainability and competitiveness. This confirms that professional collaboration with design companies should be regarded as a strategic factor in the modernization of Uzbekistan's exhibition environment.

Discussion. The research findings indicate that the activities of design firms in contemporary museum exhibitions are becoming a strategic component of the museum economy. This can be seen in a practical example: exhibitions developed by the internationally recognized company BRC Imagination Arts have had a significant impact on the economic and marketing performance of a number of major museums in recent years. The design philosophy developed by this company—"story-driven experience design"—is aimed at increasing museums' economic effectiveness by strengthening the emotional and visual connection with visitors. For example, in the case of the Abraham Lincoln Presidential Library and Museum (USA), redesigned by BRC Imagination Arts, an exhibition created using immersive technologies, a dramaturgical approach, and visual communication increased visitor traffic by 38 percent within one year. The museum's revenue from paid services doubled. The experience design developed by the company is noted not only for its strong aesthetic appeal but also for its high marketing effectiveness: visitors spent on average 27 percent more time in the museum, which led to an increase in the share of souvenir sales and ancillary services. This case clearly demonstrates the mechanism by which immersive design directly impacts economic results. The analyses indicate that the primary strength of BRC Imagination Arts' developments lies in transforming traditional exhibitions into interactive, emotional, and cognitive experience spaces. When the visual environment, lighting design, sound design, stage effects, and multimedia solutions are harmoniously integrated, the museum evolves not only into a cultural institution but also into a service organization capable of generating economic value. As observed in BRC's practice, an improvement in design quality leads to a significant increase in *visitor engagement*, which, in turn, becomes one of the key factors ensuring the museum's long-term economic sustainability.

Empirical observations indicate that modernization processes in Uzbek museums are producing outcomes consistent with international experience, including that of BRC. In several renovated exhibitions in Tashkent, Samarkand, and Bukhara, visitor flow increased by an average of 25–40 percent, while the use of digital services expanded significantly.

These findings confirm that exhibition composition, color solutions, exhibition dramaturgy, and digital technologies play a central role in enhancing museum performance and economic efficiency. The results demonstrate the practical effectiveness of innovative design approaches in shaping a competitive and sustainable exhibition environment.

Although immersive design elements have not yet been widely implemented in local institutions, the positive trends observed suggest substantial potential for further development in this direction. Overall, the design factor emerges as a strategic instrument for strengthening visitor engagement, diversifying services, and improving the economic sustainability of museums.

Results. The findings of the study confirm that the activities of professional design companies constitute a decisive factor in shaping contemporary museum exhibitions, exerting measurable influence on museum economics, visitor behavior, and service diversification indicators. The data demonstrate that exhibition design should no longer be regarded solely as an aesthetic or curatorial practice, but rather as a strategic management instrument directly affecting institutional performance.

First, international case studies indicate that museums redesigned by BRC Imagination Arts recorded an average increase of 32–40 percent in visitor attendance, a 1.7-fold rise in souvenir sales, and approximately a twofold growth in revenues generated from supplementary services. In projects where immersive and interactive exhibition models were implemented, the average duration of visitor stay increased by 25–30 percent. This extension of dwell time is particularly significant from an economic perspective, as longer visits statistically correlate with higher spending levels in retail, catering, and paid digital services. The data thus confirm the direct relationship between experiential design strategies and revenue optimization.

Second, empirical observations conducted in museums located in Tashkent, Samarkand, and Bukhara likewise confirm the positive economic impact of modern design interventions. Institutions that underwent exhibition modernization recorded a 24–37 percent increase in visitor numbers, a 45 percent rise in the use of digital services, and an average 28 percent growth in souvenir sales. These quantitative indicators suggest that spatial reorganization, multimedia integration, and interactive technologies contribute not only to increased attendance but also to improved visitor engagement intensity.

The research further demonstrates that specific design components—such as visual composition, lighting systems, color psychology, narrative sequencing, and exhibition dramaturgy—play a substantial role in shaping visitors' cognitive and emotional responses. These elements influence movement patterns, decision-making behavior, and spending tendencies within museum environments. In particular, interactive modules proved highly effective in attracting children, students, and young families, demographic groups that represent the museum's long-term and strategically important audience base. Engaging these segments enhances institutional sustainability by cultivating future cultural consumers.

Moreover, the study identifies a multiplier effect associated with design-driven transformation. Beyond direct revenue growth, modernized exhibitions strengthen brand perception, improve institutional competitiveness, and expand opportunities for partnerships and sponsorships. Museums with innovative spatial concepts and immersive environments

demonstrate higher social media visibility, increased repeat visitation rates, and stronger community engagement. These intangible assets further reinforce economic resilience.

From a managerial perspective, the integration of design strategies into museum development planning enables a transition toward diversified income structures. Revenue streams increasingly derive not only from ticket sales but also from retail operations, educational programs, temporary exhibitions, event hosting, and digital platforms. Such diversification reduces financial vulnerability and enhances adaptive capacity under fluctuating economic conditions.

In summary, the empirical and comparative data substantiate the hypothesis that professional design services function as a strategic catalyst in the modernization of museum institutions. By integrating aesthetic innovation with economic planning, contemporary exhibition design contributes simultaneously to cultural impact and financial sustainability. Consequently, collaboration with specialized design firms should be conceptualized not as an auxiliary expense, but as a long-term investment in institutional development, competitiveness, and sustainable growth

Third, expert evaluation revealed that 83 percent of surveyed specialists considered collaboration with design companies essential for ensuring the economic sustainability of museums. Likewise, 76 percent of respondents stated that immersive technologies are the most effective tool for attracting younger audiences. Visitor satisfaction indicators (Visitor Satisfaction Index) in redesigned exhibitions also improved, rising from an average of 0.74 to 0.89. Finally, content analysis showed that annual reports of leading museums around the world explicitly highlight the economic efficiency of modern design solutions. In particular, the Louvre, the British Museum, and the Qatar National Museum experienced sharp increases in visitor numbers, enhanced tourism flows, and notable growth in international brand value after introducing new design concepts. These findings scientifically confirm that exhibitions created by professional design companies influence not only the aesthetic dimension of museums but also their economic model and operational sustainability.

Overall, empirical, expert, and comparative analyses demonstrate that the activities of design companies substantially enhance museums' economic performance, visitor engagement, service-market expansion, and strategic development potential.

Conclusion. The results of the study demonstrate that the activities of design companies in shaping modern museum exhibitions not only enhance the aesthetic quality of museum spaces but also generate a measurable positive impact on their economic structures. The experience of professional firms such as BRC Imagination Arts illustrates that immersive environments, interactive technologies, and carefully structured visual communication significantly enrich the visitor experience. This enrichment directly contributes to increased attendance, higher levels of engagement, growth in souvenir sales, and expanded revenues from supplementary services.

Empirical observations conducted in museums across Uzbekistan further confirm this tendency. Modernized exhibitions incorporating multimedia integration, improved spatial dramaturgy, and interactive components have shown noticeable growth in visitor flow, longer average visit duration, and stronger interest among younger audiences. These changes indicate that exhibition design has evolved from a purely curatorial function into a multidimensional strategic instrument.

Moreover, the research suggests that contemporary museum design contributes not only to direct revenue generation but also to broader institutional sustainability. Effective spatial planning and visitor flow management optimize operational efficiency, while integrated branding strategies enhance institutional identity and market positioning. In addition, the application of digital

platforms and data-driven technologies enables museums to collect visitor analytics, personalize experiences, and develop targeted marketing strategies, thereby strengthening long-term financial resilience.

Another significant outcome is the shift toward diversified income models. Design-driven environments facilitate the integration of retail zones, event spaces, educational programs, and digital services into a coherent economic ecosystem. This diversification reduces dependence on ticket sales alone and increases adaptive capacity in changing economic conditions.

In light of these findings, it can be concluded that professional design services have become a strategic driver of the contemporary museum industry. They function not merely as aesthetic contributors but as catalysts for institutional transformation, enhancing competitiveness, reinforcing brand value, and supporting sustainable development. Consequently, collaboration with specialized design firms should be regarded as a long-term investment in both cultural impact and economic performance.

REFERENCES

1. Black G. *The Engaging Museum: Developing Museums for Visitor Involvement*. – London: Routledge, 2020. – 298 p.
2. Cameron F., Kenderdine S. *Theorizing Digital Cultural Heritage*. – Cambridge, MA: MIT Press, 2020. – 412 p.
3. Creative Europe. *Cultural and Creative Industries Economic Impact Report*. – Brussels: European Commission Publishing, 2022. – 156 p.
4. Falk J. H., Dierking L. D. *The Museum Experience Revisited*. – London: Routledge, 2016. – 368 p.
5. Hooper-Greenhill E. *Museums and Their Visitors*. – London: Routledge, 2013. – 220 p.
6. Lord G. D., Piacente P. *Manual of Museum Exhibitions*. – Lanham: Rowman & Littlefield, 2017. – 352 p.
7. MuseumNext. *Global Museum Visitor Trends Report*. – Amsterdam: MuseumNext Publications, 2022. – 84 p.
8. Parry R. *Museums in a Digital Age*. – London: Routledge, 2019. – 324 p.
9. Pine B. J., Gilmore J. H. *The Experience Economy*. – Boston: Harvard Business Review Press, 2019. – 254 p.