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FEATURES AND KEY ASPECTS OF MODERN BOARD GAME DESIGN

Vasyliev Oleksandr
PhD in Design
ORCID ID: 0000-0003-1255-3756
Zabarylo Daria
Student
Kolosov Illia
Student
Department of Graphic Design
Kyiv National university of technologies and design, Ukraine

Abstract. This article examines the characteristics of contemporary board game design and the key aspects of their development. The roles of game mechanics, visual design, ergonomics, thematic coherence, and digital technologies in creating a quality game product are considered. Current trends in board game development are analyzed, among which inclusivity, social interaction, the hybridization of physical and digital environments, and environmental sustainability occupy an important place. Contemporary game design researchers view a game as a complex of mechanics, dynamics, and emotional experience. Based on an analysis of academic sources, it is determined that board game design is a complex process combining artistic, technical, and psychological aspects of creating a gaming experience.

Keywords: board games, game design, game mechanics, ergonomics, visual design, inclusivity, digital technologies, UX design.

Introduction. Contemporary board games are an important component of the entertainment industry and interactive design. Over recent decades, the board game market has expanded significantly, and the field itself has moved beyond traditional leisure formats [6]. Today, board games are used not only for entertainment, but also in education, team building, psychology, and the development of communication skills. The popularity of modern board games is explained by their ability to combine social interaction, intellectual activity, and emotional immersion. Unlike digital games, board games provide direct communication between participants, creating a unique experience of collective interaction [11]. At the same time, the development of the board game industry has led to increased complexity in the creation process. The design of a modern board game includes not only the development of rules, but also the formation of visual style, the design of game components, the creation of an ergonomic interaction interface, and ensuring the emotional engagement of players [13]. Of particular relevance is the integration of digital technologies, the adaptation of games to the needs of different user groups, and the creation of an inclusive environment. It is for this reason that the study of the aspects and characteristics of modern board game design represents an important direction in contemporary game design.

Purpose and objectives of the study**.** The aim of this work is to analyze the main aspects and characteristics of modern board game design, as well as to identify current

development trends in this field. To achieve this goal, the following tasks are addressed: analyzing the characteristics of modern board game design; examining the influence of game mechanics on gameplay; defining the role of visual design and ergonomics; identifying and characterizing current trends in board game development; and investigating the influence of digital technologies and an inclusive approach on board game design. To achieve these objectives, a set of methods was applied, including the analysis and synthesis of academic sources, comparative and systemic approaches, as well as a practical case analysis method that allowed for the examination of current design solutions in the field of board game design.

Research results and their discussion. The issues of game design are actively studied in contemporary academic literature. Researchers and practitioners view modern board game design as a combination of systems thinking [11], player psychology [2], and visual communication [5]. A significant number of works are devoted to the analysis of mechanics, player interaction, and the principles of creating gaming experiences. J. Schell examines game design as a complex system of interaction between mechanics, emotions, and visual perception [11]. The author emphasizes that modern game design should be oriented toward creating a holistic user experience. In the work of K. Salen and E. Zimmerman, a game is defined as a system of rules and interactions between participants [10]. The authors highlight the importance of balancing mechanics and social interaction in the process of board game design. In the study by G. Engelstein and I. Shalev [3], contemporary board game mechanics and their classification are analyzed. The authors conclude that the combination of mechanics has become one of the key trends in modern board game design. Ergonomics plays an important role in board game design. D. Norman's research [8] demonstrates the significance of intuitive design and ease of user interaction with a product. Another relevant direction is the study of cognitive and visual ergonomics in board games. The article by M. Passarelli et al. [9] examines the influence of color schemes, information layout, and component form on the perception of a game. The integration of digital technologies is explored in the work of B. Maurer and V. Fuchsberger [7], where the authors analyze the prospects of combining physical board games with digital tools.

The article by S. Brylov [1] presents a comparative analysis of board game design and video game design in the context of analog and digital forms of gaming culture. Board games are defined as an analog medium based on the use of physical components — cards, tokens, dice, and game boards — which form direct social interaction and communication between participants. Key differences between the two approaches are analyzed: the material versus digital type of medium, distribution and scaling models, methods of updating rules and content, the level of immersion, and testing approaches. It is shown that board games tend toward transparency of rules, tactility, and local social interaction, while digital game design provides scalability, hidden algorithmic computation, the use of telemetry, and multimedia effects. At the same time, the shared features of both directions are emphasized — the aspiration to create a quality gaming experience, to maintain a balance between complexity and accessibility, to motivate the player, and to ensure the repeatability of gaming experiences. It is determined that

comparing analog and digital practices allows for the identification of universal design principles useful for the development of hybrid formats (AR/VR, mobile applications), as well as for improving educational programs and research approaches in the field of modern creative industries. In the work of A. Tarasenko and S. Makoid [12], a methodology for developing the design of educational board games for children is presented.

Based on the conducted research, it is established that game mechanics are the central element of any board game. They define the rules of interaction between players and shape the dynamics of the gameplay. Modern board games actively employ the combination of mechanics: resource management, area control, cooperative interaction, hidden role systems, deck building, and narrative event development. The combination of multiple mechanics allows for the creation of a more complex and varied gameplay experience [3]. It is found that game balance plays a particularly important role. Poor balancing can lead to the dominance of certain strategies or a loss of player interest. This is why modern games undergo multi-stage testing before reaching the market [10].

The visual component of modern board games is one of the main factors in a product's appeal. Visual aesthetics are the primary element that ensures the first impression of a game and attracts consumer attention, and accordingly, visual design serves as a channel for emotional engagement. Modern publishers devote significant attention to artistic illustrations, the detailing of components, the stylization of cards and game boards, packaging design, and the creation of the game's atmosphere. Visual style helps shape emotional immersion and supports the thematic integrity of the game. For example, fantasy games use vivid colors and complex illustrations, while economic strategy games tend toward minimalist design [11]. Beyond aesthetics, the informativeness of the design is equally important. Icons, colors, and symbols must be clear to players and facilitate the perception of information [9].

Modern board game design actively employs UX design principles to ensure ergonomic quality. The primary goal in this case is to create a comfortable user interaction with the game. Key aspects of ergonomics include: material quality, component size, readability of text, organization of the play space, and the speed of game setup. Modern publishers frequently use organizers, custom inserts, and component sorting systems. This allows for an improved user experience and reduced setup time [8].

Inclusivity is one of the important trends in modern game design. Developers strive to make board games accessible to the widest possible audience. Key solutions include: color adaptation for people with color vision deficiency, the use of large fonts, localization into multiple languages, the simplification of rules, and the use of universal symbols. An inclusive approach allows board games to become more accessible and popular among different categories of users [8].

Modern board games increasingly combine physical and digital elements. Mobile applications can serve the functions of: game host, scenario generator, score tracker, musical accompaniment, and augmented reality. Such technologies expand the capabilities of board games and create new formats of interaction between players [7].

Unlike most digital games, board games are oriented toward direct interaction between people. Modern design encourages: teamwork, communication, negotiation, and joint decision-making. This is especially characteristic of cooperative games and games with hidden roles, where social interaction is the primary element of gameplay [Salen K.].

Conclusions. The study establishes that the design of modern board games is a complex process combining artistic, technical, psychological, and ergonomic aspects. The foundation of a quality board game is the harmonious combination of game mechanics, visual design, and ease of user interaction with the components. Current trends in board game development indicate the growing importance of inclusivity, social interaction, and the integration of digital technologies. The use of UX approaches and the creation of an emotional experience for players also represents an important direction of development.

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