

**UNIVERSITY OF ECONOMICS – VARNA
FACULTY OF MANAGEMENT
DEPARTMENT OF MARKETING**

ANDREY ANDREEV KOSTOV

**Opportunities for Positioning Brand Extensions among
Generation Z**

AUTHOR’S ABSTRACT

OF THE DISSERTATION

FOR THE AWARD OF THE EDUCATIONAL AND SCIENTIFIC DEGREE “DOCTOR”
IN PROFESSIONAL FIELD 3.8. ECONOMICS,
SCIENTIFIC SPECIALTY “MARKETING”

Scientific Supervisor:

PROF. EVGENI PETROV STANIMIROV, PhD

Scientific Jury:

1. Prof. Bistra Konstantinova Vasileva, PhD
2. Assoc. Prof. Vladimir Sashov Zhechev, PhD
3. Prof. Galina Pencheva Mladenova, PhD
4. Assoc. Prof. Nadezhda Yordanova Dimova, PhD
5. Assoc. Prof. Dimitar Ivanov Trendafilov, PhD

Reviewers:

1. Assoc. Prof. Vladimir Sashov Zhechev, PhD
2. Prof. Galina Pencheva Mladenova, PhD

VARNA

2026

The dissertation consists of 292 pages, including: title page and table of contents – 4 pages; lists of tables, figures, appendices, and abbreviations – 4 pages; introduction – 8 pages; Chapter One – 75 pages; Chapter Two – 65 pages; Chapter Three – 70 pages; conclusion – 6 pages; references – 13 pages; appendices – 46 pages. The dissertation includes 28 tables, 34 figures, and 9 appendices, which constitute an integral part of the study. The reference list comprises 197 sources in Bulgarian and English.

The public defence of the dissertation will take place on 17.04.2026, at 10:00 hours, in Hall 205 at the University of Economics – Varna, at a meeting of the Scientific Jury appointed by Order No. РД-06-25 dated 28.01.2026 of the Rector of the University of Economics – Varna.

The materials related to the defence are available at the University of Economics – Varna (77 Knyaz Boris I Blvd., Varna) and on the official website of the University of Economics – Varna: www.ue-varna.bg

The dissertation was discussed and approved for public defence by the Department of Marketing at the University of Economics – Varna. The author is a doctoral candidate at the Department of Marketing at the University of Economics – Varna. The research underlying the dissertation was conducted at the same university.

Author: Andrey Andreev Kostov

Title: Opportunities for Positioning Brand Extensions among Generation Z

Print run: ... copies

Printed by: Printing House of the University of Economics – Varna

I. GENERAL CHARACTERISTICS OF THE DISSERTATION

1. Relevance of the Research Topic

The relevance of the research is determined by the evolution of branding as a managerial and communication concept and by its increasing role in shaping brand value and identity in the context of a dynamic and highly competitive market environment. Although branding practices have deep historical roots, the brand as a strategic instrument for value management was consolidated during the twentieth century and is currently understood as a multilayered system of consumer memories, associations, and experiences, supported by coordinated production, distribution, and communication processes (Kapferer, 2010; Keller, Apéria, & Georgson, 2012; Kotler & Keller, 2012).

In contemporary conditions, the need for adaptation and development of brands is critical for maintaining their relevance and consumer trust. Among the key strategic approaches for sustaining and expanding brand value, brand extensions stand out as a means of reaching new market segments, building additional associations, and strengthening market presence. Their effective implementation requires the strategic use of existing brand assets and clear positioning, aligned both with the potential of the parent brand and with the market context (Keller, 2016; Völckner & Sattler, 2020).

The significance of the topic is further reinforced by the unprecedented intensity of competition and the fragmentation of the market environment, in which consumer attention has become a scarce resource. Globalization, digital platforms, and low barriers to entry enable an increasingly wide range of actors to build and communicate brands, thereby necessitating the search for innovative positioning approaches (Wedel & Kamakura, 2000).

In this context, video games are increasingly established as a strategic communication and branding environment. Over the past decade, they have evolved into a global cultural and economic industry, with the COVID-19 pandemic further accelerating this transformation. The global video game market exceeded USD 180 billion in 2022 and is expected to surpass USD 200 billion by 2025 (Newzoo, 2025).

Platforms such as Twitch and YouTube Gaming, as well as virtual worlds like Fortnite¹ и Roblox², expand the role of video games as spaces for social interaction and brand communication. This trend is further evidenced by the active participation of international companies such as Nike, Gucci, and Coca-Cola (Sjöblom & Hamari, 2017).

The relevance of the research is further strengthened by broader technological and social trends, including the development of metaverses³ and Web3⁴ technologies, which introduce new forms of digital ownership and long-term engagement (Mystakidis, 2022; Dwivedi et al., 2023; Hennig-Thurau, Hofacker, & Bloching, 2023); the expansion of gamification⁵ beyond the entertainment industry; growing expectations regarding social responsibility and sustainability; and the integration of artificial intelligence in the creation of personalized brand experiences.

At the center of these processes stands Generation Z—a digitally native cohort for whom virtual environments represent a natural space for communication, identity formation, and consumption. The high sensitivity of this generation to authenticity, visual culture, and values makes video games a particularly suitable context for the positioning of brand extensions, in which the brand functions not merely as a communicative symbol but as an active participant in the consumer experience.

2. Subject and Object of the Research

The object of the research in the dissertation is brand extensions as a strategic instrument in the management of brand value.

¹ Fortnite - A popular online multiplayer game developed by Epic Games that combines genres such as battle royale, creative mode, and cooperative missions. Beyond its gameplay functions, it operates as a platform for social events and marketing integrations, including concerts, film premieres, and brand campaigns (Epic Games, 2023).

² Roblox - An online platform and game-creation ecosystem developed by Roblox Corporation. Users can not only play games but also create and program their own games and virtual worlds. Roblox is particularly popular among Generation Z and provides a rich environment for brand integrations (Roblox Corporation, 2023).

³ Metaverse – A concept referring to a collective virtual space in which physical and digital realities converge through virtual reality (VR), augmented reality (AR), and social platforms. The metaverse is regarded as the next stage of the Internet, where users can work, play, and interact with brands in immersive digital environments (Mystakidis, 2022).

⁴ Web3 - The third generation of the Internet, based on blockchain technology, decentralization, and user control over data. Web3 enables new business models such as peer-to-peer transactions, smart contracts, and digital assets, which can also be applied within gaming environments (Xu et al., 2019).

⁵ Gamification - The use of video game design elements (such as points, levels, and challenges) in non-game contexts including education, marketing, and business. Gamification enhances user engagement and represents an important component of contemporary brand positioning strategies (Deterding et al., 2021).

The subject of the research is the perception of in-game assets as an effective positioning instrument among Generation Z in Bulgaria.

3. Research Aim and Objectives

The **primary aim** of the dissertation is to assess the potential of branded content in video games as a positioning instrument for brand extensions targeted at Generation Z.

To achieve this aim, the following **research objectives** are defined:

First, to develop a theoretical framework through critical analysis and systematization of the academic literature in the fields of positioning theory, brand extension, and generational theory, with a specific focus on Generation Z.

Second, to analyze key trends in the video game industry in order to identify opportunities for integrating brand extensions, by conducting a market analysis supported by a content analysis of video games popular among Generation Z.

Third, to assess the perceptions of Generation Z representatives regarding positioning through branded in-game assets.

Fourth, to evaluate the perceptions of marketing professionals concerning the effectiveness of branded content in video games as a positioning tool, and to propose a conceptual framework and an evaluation model for in-game assets applicable to the positioning strategy of brand extensions.

4. Research Thesis of the Dissertation

The research thesis of the dissertation posits that the perceived effectiveness of brand extensions in video game environments among Generation Z can be explained and measured through specific qualitative and quantitative indicators reflecting the degree of similarity and semantic compatibility between the brand extension, the game world, and its mode of positioning through branded in-game assets.

In support of this thesis, a conceptual model has been developed for the ex ante evaluation of this similarity, designed to assist organizations in the process of strategic decision-making regarding the appropriateness of integrating a specific brand extension into a particular video game as part of its positioning strategy.

5. Research Methodology

The research methodology is based on a mixed-methods approach that integrates qualitative and quantitative methods in order to provide a comprehensive assessment of the potential of branded content in video games as a positioning instrument for brand extensions targeting Generation Z. In the first stage, a structured content analysis was conducted of video games popular among Generation Z in PC and console environments that include branded in-game assets. The analysis aimed to identify the types of integrations, the degree of conceptual and visual similarity between brand extensions and game worlds, as well as the positioning approaches employed. The results obtained serve as an empirical foundation for the operationalization of key variables in the subsequent stages of the study. In the second and third stages, two quantitative studies were carried out—one among representatives of Generation Z and one among marketing professionals. The first quantitative study measures consumer perceptions of the relevance, authenticity, and effectiveness of positioning through branded in-game assets, based on clearly defined criteria for gaming engagement. The second quantitative study analyzes marketing professionals' evaluations of the use of branded content in video games, the perceived benefits and risks, and its strategic applicability.

The synthesis of results from all three stages was used to develop and substantiate a practically applicable model for the ex ante evaluation of similarity between the brand extension, the game world, and the mode of positioning through in-game assets.

6. Main Research Limitations

The study examines branded in-game assets in video games (PC and console environments) and excludes mobile games, which are considered in the dissertation solely for comparative purposes. Their exclusion is based on several factors. First, production costs in terms of financial resources and labor hours are significantly lower than those required for the development of video games. Second, mobile games are typically integrated with advertising networks that allow the display of interruptive video advertisements during gameplay. Such practices are largely absent in PC and console video games, including free-to-play titles, which primarily rely on

microtransactions. Third, the duration of use differs substantially: mobile games are characterized by short play sessions lasting four to six minutes (Grgurić, 2024; Newzoo, 2024), whereas PC and console video games typically involve sessions of two to four hours (Entertainment Software Association, 2024; Newzoo, 2025).

The dissertation explicitly focuses on video game users born between 1997 and 2012 (the so-called Generation Z). This generational focus is justified by the fact that Generation Z is the first fully digital generation, characterized by a profound shift in habits and patterns of digital information use for communication, knowledge acquisition, and entertainment.

An additional criterion in data collection among video game users is weekly time spent in gaming environments, set at a minimum of 14 hours. This threshold is based on a 2019 study commissioned by SES Astra (profit.bg, 2019), which found that Bulgarians spend an average of two to three hours per day watching television. As video games are treated in the dissertation as a communication channel, the minimum viewing time is adopted as a daily average benchmark.

II. STRUCTURE OF THE DISSERTATION

In line with the stated aim and research objectives, the dissertation is structured in the following sequence:

INTRODUCTION

CHAPTER ONE: THEORETICAL FOUNDATIONS OF BRAND EXTENSION AND POSITIONING IN THE CONTEXT OF GENERATION Z

1. Brand Extension as a Strategic Instrument

1.1 Conceptual and Strategic Foundations of the Brand in Contemporary Marketing

1.1.1 Conceptual Foundations and the Evolution of the Brand as a Strategic Asset

1.1.2 Brand Life Cycle and Preconditions for Brand Extensions

1.2 Types of Brand Extensions and Strategic Approaches

1.2.1 Horizontal and Vertical Brand Extensions

1.2.2 Line and Category Brand Extensions: Similarity and Transfer of Brand Associations

1.3 Motives, Process, and Risks of Brand Extension

1.3.1 Strategic Motives and the Brand Extension Process

1.3.2 Risks and Success Factors in Brand Extension

2. Generation Z and Cohort Theory as a Consumer Framework

2.1 Cohort Theory and Its Application in Marketing

2.1.1 Conceptual Foundations of Cohort Theory

2.1.2 Cohort Theory in a Marketing Context: Critiques, Limitations, and Applicability

2.2 Generation Z as a Consumer Cohort

2.3 Behavioral Characteristics of Generation Z in a Brand Context

3. Positioning and Functioning of Brand Extensions in Digital Ecosystems

3.1 Positioning as a Strategic Framework for Brand Extensions

3.1.1 Positioning as a Strategic Process and Managerial Choice

3.1.2 Positioning Strategies for Brand Extensions

3.2 Operational Interoperability and Brand–Consumer Interaction in Digital Ecosystems

3.2.1 The Concept of Brand Operational Interoperability in Digital Ecosystems

3.2.2 Brand–Consumer Interaction in Digital Environments

3.3 Digital Brand Value Carriers

3.3.1 Theoretical Foundations of Digital Brand Value Carriers

3.3.2 Definition and Characteristics of Digital Brand Value Carriers

CHAPTER TWO: METHODOLOGICAL AND MARKET ASPECTS OF VIDEO GAME CONSUMPTION IN BULGARIA AMONG GENERATION Z

1. Methodology for Researching and Analyzing Opportunities for Positioning Brand Extensions

1.1 Information Support of the Dissertation

1.2 Operationalization and Design of Survey Instruments for Quantitative Research

2. Video Games in Bulgaria: Market and Opportunities for Brand Positioning

2.1 Video Games as an Environment for Brand–Consumer Communication

2.1.1 Evolution of Video Games as a Communication Channel

2.1.2 Typology of Video Games and Consumer Segmentation

2.1.3 Models of Brand Integration in Video Games

2.2 Characteristics of the Video Game Sector in Bulgaria

2.2.1 Size and Structure of the Bulgarian Video Game Market

2.2.2 Profile of the Target Audience in Bulgaria

2.2.3 Opportunities and Challenges for Brands in the Bulgarian Video Game Market

3. Study of Practices in the Use of In-Game Assets as Carriers of Brand Value

3.1. Algorithm for Categorizing and Evaluating Brand Assets in Video Games

3.1.1 Stages and Variables of the Algorithm

3.1.2 Operationalization of Variables and Data Generation Procedure

3.2 Analysis of Practices for Positioning Brands and Brand Extensions in Video Games

CHAPTER THREE: METHODOLOGICAL TOOL FOR THE EVALUATION AND PRESENTATION OF IN-GAME ASSETS FOR THE PURPOSES OF POSITIONING BRAND EXTENSIONS AMONG GENERATION Z

1. Impact of Branded In-Game Objects on Generation Z Perceptions

1.1. Respondent Profile and Exposure to Branded In-Game Assets

1.2. Perceptions of In-Game Asset Integration

1.3. Hypothesis Testing, Discussion, and Interpretation of Result

2. Marketing Perspectives for Positioning Brand Extensions through Brandable Assets in Video Games

2.1. Respondent Profile and Marketing Strategy of Organizations

2.2. Awareness of and Attitudes toward the Strategy of Integrating Branded In-Game Assets

2.3. Hypothesis Testing, Discussion, and Interpretation of Results

3. Model for Evaluating a Brandable In-Game Asset in a Video Game for the Purposes of Brand Extension Positioning

3.1. Structure and Indices of the Evaluation Model for Brand Integration in Video Games

3.2. Information Base and Evaluation Indices of the Model for Brand Integration in Video Games

3.3. Operationalization of the Evaluation Model for Brand Integration in Video Games

CONCLUSION

References

Appendices

III. MAIN CONTENT OF THE DISSERTATION

INTRODUCTION

The Introduction substantiates the relevance and significance of the issues related to the use of branded content in video games as a positioning instrument for brand extensions targeting Generation Z. It defines the object and subject of the research, as well as the primary aim and key objectives of the dissertation. The author's research thesis is formulated, emphasizing the importance of similarity between the brand extension, the game world, and the mode of positioning through branded in-game assets, and the logic and sequence of the exposition are briefly outlined. The main stages and research methods, as well as the adopted research limitations within which the study was conducted, are also specified.

CHAPTER ONE: Theoretical Foundations Of Brand Extension And Positioning In The Context Of Generation Z

Chapter One of the dissertation establishes the theoretical foundation of the study by examining brand extensions as a strategic instrument for growth and brand value transfer in the context of digital transformation. The brand is conceptualized as an intangible asset whose value is formed through a system of associations, perceptions, and relationships, with particular emphasis placed on the importance of brand concept consistency and alignment with audience expectations for the successful transfer of brand associations.

Within the chapter, the selection of Generation Z as a relevant consumer framework is justified through cohort theory, and key behavioral characteristics with direct implications for brand strategies are systematized, including digital socialization, sensitivity to authenticity, multi-platform consumption, and the dynamics of attention and participation.

The positioning of brand extensions is also analyzed within digital ecosystems, where the brand operates as an active participant in platforms characterized by predefined technological and organizational constraints. In this context, the concept of digital brand value carriers is introduced as a conceptual framework that provides the

theoretical basis for subsequent operationalization and its application in the study of branded in-game assets.

1. Conceptual and Strategic Foundations of the Brand in Contemporary Marketing

Paragraph 1 examines brand extension as a strategic approach for the sustainable expansion and adaptation of the brand in a dynamic market environment. It presents the core concepts related to the development of the brand as an asset with cumulative value, as well as the logic of leveraging already established associations and trust when entering new product categories, segments, and markets. A distinction is drawn between brand extension and the creation of new brands, with emphasis placed on the opportunities for capitalizing on accumulated brand value and the resulting strategic constraints related to the identity and perceptions of the parent brand.

Paragraph 1.1 explores the evolution of the brand as a strategic asset, tracing the shift from product- and transaction-oriented approaches toward an understanding of the brand as a system of associations, perceptions, and relationships that accumulates value over time. Key concepts related to the establishment of the brand as an instrument for differentiation and competitive advantage are analyzed in the context of the development of market segmentation, positioning, and consumer orientation in marketing (Smith, 1956; Aaker, 1996; Keller, 1993). Particular emphasis is placed on the shift in focus from objective product characteristics to consumer perceptions, as well as on the role of brand associations as the primary carriers of brand value (Kapferer, 2010).

The systemic structure of the brand is examined through the interrelationship between brand identity, image, and reputation, taking into account the distinctions between internally managed identity and the externally formed image in the minds of consumers (Aaker, 1996; Keller, 2001). As an analytical tool, Kapferer's Brand Identity Prism is presented, enabling an integrated analysis of the strategic and perceived dimensions of the brand (Kapferer, 2008). Emphasis is placed on the role of perceived quality and the strength of brand associations in building trust, loyalty, and the long-term sustainability of brand value (Dobni & Zinkhan, 1990; Keller, 2003).

The paragraph also addresses the brand life cycle as an analytical framework distinct from the product life cycle, reflecting the dynamics of perceptions, associations, and trust rather than solely market behavior (Kapferer, 2010; Bivainiene, 2010). It is argued that a well-managed brand can outlive individual product cycles through strategic adaptation and renewal, thereby creating the theoretical prerequisites for the use of brand extensions as a mechanism for extending maturity and transferring brand value to new product categories.

Paragraph 1.2 examines brand extension as a strategic instrument for managing and expanding brand value, established in marketing theory and practice as a mechanism for capitalizing on accumulated associations, trust, and loyalty toward the parent brand (Tauber, 1988; Aaker & Keller, 1990). A distinction is made between horizontal and vertical brand extensions, taking into account their differing strategic orientations, applicability, and levels of risk (Keller, 2016). The analysis indicates that horizontal extensions are perceived as more flexible and are more frequently employed due to their ability to enter new segments with a relatively lower perceived risk, whereas vertical extensions enable expansion within an existing category but require a high degree of consistency in the perceived quality and positioning of the parent brand (Kim & Lavack, 2001).

Within this paragraph, emphasis is placed on the role of perceived similarity between the parent brand and the extension as a key factor in consumer evaluation and acceptance of the extension (Aaker & Keller, 1990; Broniarczyk & Alba, 1994). The distinction between functional and image-based similarity and their differing significance for line and category brand extensions is examined (Park, Milberg, & Lawson, 1991). It is highlighted that in line extensions, the transfer of perceived quality predominates, whereas in category extensions, the symbolic and image-based transfer of brand meanings plays a leading role (Keller, 2001; Völckner & Sattler, 2006). The analysis demonstrates that the success of brand extensions depends more strongly on the consistency and strength of brand associations than on the formal type of extension, as an inappropriate alignment between brand identity and the new category may result in increased perceived risk and erosion of brand value (Kapferer, 2004; Keller, 2020).

Paragraph 1.3 addresses brand extension as a multi-stage strategic process, in which extension decisions are made in the context of the existing brand identity, market logic, and the long-term sustainability of brand value. The main strategic motives for implementing brand extensions are analyzed, including the capitalization of accumulated brand value, the transfer of positive associations, and the reduction of perceived risk when entering new product categories (Tauber, 1988; Aaker & Keller, 1990; Keller, 2003). Emphasis is placed on the role of the parent brand’s life cycle stage as a factor that determines both the potential for extension and the level of strategic risk involved (Kapferer, 2010).

Within this paragraph, brand extension is presented as an integrated decision-making process that begins with an analysis of brand identity and permissible directions of extension, and proceeds through an evaluation of perceived similarity, market context, and consumer responses (Figure 1). Particular emphasis is placed on the need for ex ante assessment of the extension’s associative logic and its compatibility with brand meaning, as consumers interpret extensions through cognitive references based on similarity and the clarity of the link to the parent brand (Aaker & Keller, 1990; Keller, 2001).

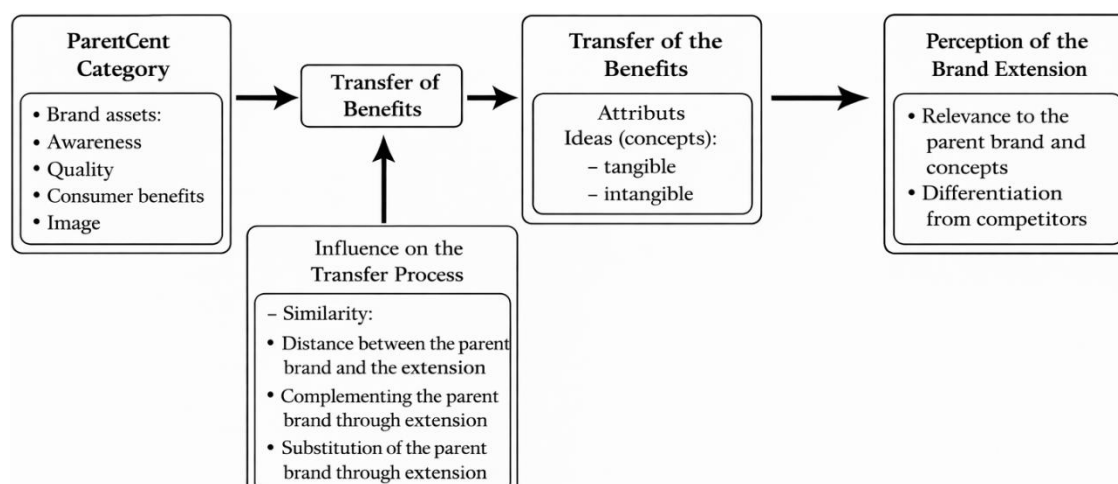


Figure 1. Brand Extension Decision-Making Process

Source: Kapferer, J.-N. (2010). The New Strategic Brand Management.

The main risks associated with brand extension are analyzed, including brand identity dilution, erosion of perceived quality, cannibalization within the brand portfolio, and the bidirectional associative transfer between the parent brand and the extension (Kapferer, 2004; Bottomley & Holden, 2001; Kim & Lavack, 2001).

In conclusion, the key success factors of brand extensions are systematized, such as perceived quality, the strength of brand associations, the degree of similarity, and the level of marketing support, as examined in integrated models for extension evaluation (Völckner & Sattler, 2006). This analysis substantiates the need for a structured and ex ante approach to the assessment of brand extension as a strategic process with long-term implications for brand value.

2. Generation Z and Cohort Theory as a Consumer Framework

Paragraph 2 examines Generation Z within the framework of cohort theory as an analytical lens for interpreting contemporary consumer behavior in marketing. The key characteristics of Generation Z in a brand context are systematized, providing the theoretical foundation for the subsequent empirical analysis of brand interactions in digital environments.

Paragraph 2.1 traces the theoretical foundations of cohort theory and its application in marketing research as an analytical framework for interpreting long-term social and consumer changes. The foundational ideas of generations as a social construct, shaped by shared historical, cultural, and social conditions, are examined (Mannheim, 1952), along with the subsequent development of the theory from cultural-historical and value-based perspectives (Strauss & Howe, 1991; Inglehart, 1997). Emphasis is placed on the ability of the cohort approach to identify enduring patterns of consumption and brand perceptions that cannot be adequately explained solely through demographic variables or life-cycle stages.

Within this paragraph, the main directions of application of cohort theory in marketing are systematized, including generational segmentation and the analysis of value orientations, while also addressing key critiques and limitations related to the risks of overgeneralization, cultural specificity, and intra-cohort heterogeneity (Costanza et al., 2012; Parry & Urwin, 2011). A distinction is drawn between the analytical use of generations as an interpretative tool for understanding trends and their popular treatment as homogeneous market labels. In conclusion, the applicability of cohort theory is justified as a heuristic instrument for examining brand perceptions and positioning,

serving as the theoretical basis for the analysis of Generation Z in the context of brand strategies and brand extensions (Schewe & Meredith, 2004; Keller et al., 2012).

Paragraph 2.2 examines Generation Z as a distinct consumer cohort, shaped under conditions of accelerated social, technological, and economic transformations. Emphasis is placed on the methodological challenges involved in analyzing generational differences, arising from the overlap of age, period, and cohort effects, as well as on the high degree of intra-cohort heterogeneity characteristic of Generation Z (Costanza et al., 2012; Bolton et al., 2012). It is argued that Generation Z should be viewed not as a homogeneous group but as a set of sub-cohorts, formed under the influence of differing social and technological trajectories.

Within the paragraph, the key characteristics of Generation Z as a global digital cohort are systematized, including early digital socialization, multi-platform behavior, and heightened sensitivity to authenticity, value, and social context (Seemiller & Grace, 2016; Priporas et al., 2017). Differences in the academic literature regarding the age boundaries of Generation Z are also acknowledged; for the purposes of the present study, the definition proposed by the Pew Research Center (2019) is adopted as an analytical framework facilitating comparative and empirical analysis. In conclusion, it is emphasized that the analytical value of Generation Z does not stem from the unification of behavior, but from the ability to identify shared contexts within which dynamic and diverse consumer patterns emerge.

Paragraph 2.3 analyzes the behavioral characteristics of Generation Z in a brand context, examining them through the lens of digital socialization, constant connectivity, and high information intensity. Generation Z is presented as the first consumer cohort for which digital and physical environments function as an integrated space, resulting in brands being perceived not merely as providers of products and services, but as active participants in social, cultural, and digital ecosystems (Vredenburg et al., 2020). This leads to a transformation in the way brand value is created—shifting from traditional advertising exposure toward experiences, interactions, and participation within digital environments.

Within the paragraph, emphasis is placed on Generation Z's heightened skepticism toward traditional advertising communication and the phenomenon of "advertising fatigue", which are characteristic of consumers socialized under conditions of constant advertising exposure. Research indicates that one-way and intrusive advertising formats are losing effectiveness among this cohort, whereas communication approaches based on dialogue, personalization, and meaningful content are perceived far more positively (Fromm & Read, 2018; Ko & Megehee, 2021). In this context, a shift in expectations toward advertising is observed-from persuasion to participation and interaction (McKinsey & Company, 2018).

Particular attention is devoted to the role of authenticity, value consistency, and corporate social responsibility of brands. For Generation Z, brand evaluation is shaped not only by functional attributes, but by the alignment between communicated and enacted values, with inconsistencies leading to heightened skepticism and negative perceptions (Priporas et al., 2017; Bolton et al., 2012). Authenticity also manifests as an aesthetic preference for unfiltered, spontaneous, and "imperfect" content, which reduces the distance between brand and consumer and strengthens trust (Audrezet et al., 2020).

The paragraph also examines the central role of influencers and user-generated content as mechanisms of social validation and brand perception formation. For Generation Z, recommendations from peers, micro-influencers, and content creators are perceived as more credible than official brand communication, with trust being built through the cumulative effect of multiple informal interactions across social platforms (Djafarova & Bowes, 2021; Lou & Yuan, 2019). This process is further reinforced by the algorithmic logic of digital platforms, which structures exposure and repetition of brand messages.

In conclusion, it is argued that Generation Z demonstrates a clear preference for branded content and immersive consumer experiences that incorporate interactivity, gamification, and co-creation. These formats align with the cohort's fragmented attention and visual culture and enable deeper engagement with brand identity (Lou & Yuan, 2019; Pillai et al., 2021). The analysis shows that, for Generation Z, brands function not only as carriers of functional value but as resources for personal and social identity construction, necessitating a rethinking of communication strategies and

providing a theoretical foundation for exploring alternative digital formats and environments for positioning.

3. Positioning and Functioning of Brand Extensions in Digital Ecosystems

The positioning of brand extensions in digital environments requires an extension of classical brand strategies through a perspective that accounts for the complexity of digital ecosystems and the active role of consumers, particularly in the case of Generation Z. In this context, **Paragraph 3** introduces the concept of digital brand value carriers as an analytical instrument for examining forms of brand presence and mechanisms of value creation in digital environments.

Paragraph 3.1 examines positioning as a strategic framework for managing brand extensions, interpreting it as a long-term managerial choice based on the purposeful construction of brand meanings and associations in consumers' minds (Aaker, 1996; Kotler & Keller, 2009; Keller, 2016). Emphasis is placed on the distinction between intended and perceived positioning, as well as on the role of perceived fit between the brand and the extension as a key factor for consumer acceptance and for the successful transfer of brand associations (Ries & Trout, 2001; Aaker & Keller, 1990). In conclusion, it is argued that the positioning of brand extensions constitutes a complex and dynamic process requiring strategic consistency, a balance between similarity and differentiation, and context sensitivity, particularly under conditions of digital environments and multi-platform interactions (Bridges et al., 2000; Keller et al., 2012).

Paragraph 3.2 develops a theoretical framework for analyzing the positioning and functioning of brands in digital ecosystems by introducing the concept of brand operational interoperability through analogies with software architecture and information systems. Building on the principles of modularity and interoperability established in research on digital platforms (Baldwin & Clark, 2000; Yoo et al., 2010; Hoffman & Novak, 2018), the brand is conceptualized as a system of interconnected elements-identity, associations, functionalities, and extensions-whose effectiveness depends on their ability to exchange and transfer meanings across different digital contexts (Merz et al., 2009).

On this basis, the dissertation introduces a working definition of brand operational interoperability as the *ability of systems, products, and digital manifestations of different brands to function jointly within shared or interconnected environments in order to achieve common or complementary objectives*. The concept is operationalized by distinguishing between two main types of operational interoperability-horizontal (Figure 2) and vertical-which enable an analytical description of different configurations of interaction and brand value transfer in digital environments (Hang, 2022).

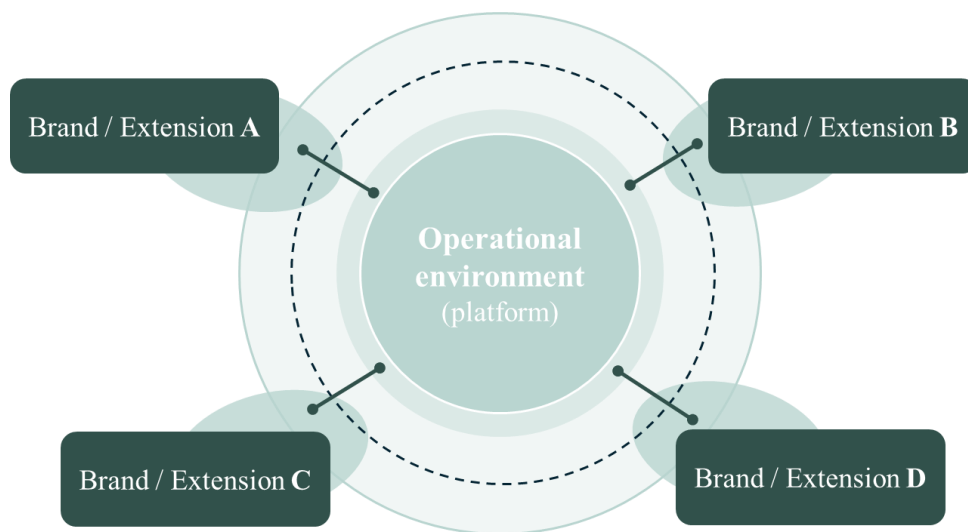


Figure 2. Horizontal Brand Operational Interoperability

Source: Author's own work, adapted⁶ from Hang, 2022. The Future of Brand Loyalty - It Starts with Interoperability

Within the paragraph, it is emphasized that operational interoperability requires an extension of classical integrated marketing communications models, shifting the focus from a unified message toward the capacity for adaptation and functional integration across diverse digital environments, without loss of brand identity and value (Keller, 2009; Schultz & Schultz, 2004). Operational interoperability is examined as a key mechanism for activating and transferring brand value in multi-platform ecosystems, where value is realized through use and interaction, rather than solely through communication exposure (Ramaswamy & Ozcan, 2018).

⁶ The figure is adapted based on the principles of modularity presented in the source, applied in the context of loyalty programs.

Paragraph 3.2.2 directs the analysis toward brand–consumer interaction in digital environments, conceptualizing it as a central process in the creation of brand value. Consumers are conceptualized as active participants in networks of interactions, in which the brand functions not only as a symbol but as an interface that mediates experiences and usage (Hoffman & Novak, 2018). In this context, the role of touchpoints is examined as an analytical instrument for systematizing brand–consumer contacts (Lemon & Verhoef, 2016), along with their main types according to the degree of control—paid, owned, and earned (Kotler & Armstrong, 2017).

The paragraph critically acknowledges the limitations of the classical touchpoint approach, stemming from its static and communication-oriented nature, which fails to adequately capture the processual and functional character of interaction in digital ecosystems (Baxendale et al., 2015). In response to these limitations, the concept of value co-creation is introduced as an alternative theoretical framework, in which value is understood as the outcome of interaction among brands, consumers, and digital platforms (Ramaswamy & Ozcan, 2018). In this sense, brand operational interoperability is interpreted as a precondition for effective value co-creation and for the deep integration of the brand into consumer practices within digital environments.

Paragraph 3.3 introduces the concept of Digital Brand Value Carriers (DBVC) as an analytical framework for examining brand presence and positioning in digital environments that are not directly owned by the brand. Building on the understanding of digital ecosystems and multi-channel consumer experience, the brand is conceptualized not merely as a communication symbol but as an active participant in external digital environments, whose rules of interaction are predefined by technological, organizational, and contractual frameworks (Yoo et al., 2010; Lemon & Verhoef, 2016; Parker et al., 2016). The analysis demonstrates that classical concepts of brand channels, product positioning, and co-branding do not adequately capture functionally embedded brand elements that participate directly in consumer practices and value creation processes (Russell & Belch, 2005; Ramaswamy & Ozcan, 2018).

From a theoretical perspective, the concept of Digital Brand Value Carriers (DBVCs) is grounded in a synthesis of several complementary approaches, including brand ecosystems (Pinar et al., 2014; Merz et al., 2009), embedded branding and product

positioning (Lehu, 2007; Martí-Parreño et al., 2017), digital media interactivity (McMillan & Hwang, 2002; Hoffman & Novak, 2018), and Service-Dominant Logic (Vargo & Lusch, 2004). This interdisciplinary synthesis allows the brand to be conceptualized as an open and functional construct, whose value is activated through use and interaction, rather than solely through communication exposure.

On this basis, the dissertation formulates the following working definition:

Digital Brand Value Carriers are functional and/or interactive digital elements embedded in digital environments that are not directly owned by the brand, through which the brand transfers, activates, and co-creates brand value in the process of consumer use.

Within the paragraph, the distinction between Digital Brand Value Carriers (DBVC) and classical advertising formats, embedded branding, and traditional brand touchpoints is emphasized, with a focus on the functional, interactive, and process-oriented nature of DBVCs, which transforms them into structural elements of the digital environment rather than objects of passive exposure (Russell, 2002; Baxendale et al., 2015; Hoffman & Novak, 2018).

In **Subsection 3.3.2**, the key characteristics of Digital Brand Value Carriers are systematized and serve as the basis for their operationalization in the empirical study (Table 1). These include functionality and degrees of interactivity, duration of exposure, static versus dynamic nature, and repeatability. This typology enables the transformation of the DBVC concept into a practical analytical instrument for subsequent content analysis and comparative examination of different forms of brand integration in digital environments.

In summary, Digital Brand Value Carriers are conceptualized as an independent theoretical category that goes beyond traditional exposure-based branding frameworks and shifts the focus toward the functional participation of the brand in the logic of use and interaction.

Table 1.

Operationalization of the Characteristics of Digital Brand Value Carriers

Characteristic	Degree/Type	Description	Examples
----------------	-------------	-------------	----------

<i>Functionality</i>	Functional carrier	Each DBVC contributes to achieving a specific consumer goal or supports the logic of the digital environment	Branded “Select delivery” button; courier company office locator; branded item in a video game
<i>Interactivity</i>	None	The carrier does not allow interaction; the user is a passive observer	Branded object in a video game without usability; static branded logo in an interface
	Partial	Allows limited interaction that does not alter the core narrative or functionality	Button linking to the brand’s website; use of a branded vending machine without gameplay impact
	Full	The carrier is essential to the functioning of the environment or to narrative progression	Embedded courier office locator in the checkout process; branded weapon/vehicle required for game progression
<i>Duration of Exposure</i>	Short	Brief presence or interaction within a session	Pop-up element; one-time service selection screen
	Extended	The carrier is available for a longer period during use	Branded interface element in a game or website
	Permanent	The carrier is continuously present in the environment	Navigation module or system button with branded functionality
<i>Static / Dynamic Nature</i>	Static	Changes require modification of the digital environment (code, design, structure)	Branded element embedded directly in the code of a website or video game
	Dynamic	Changes can be made via an admin panel or external system	Branded banner or functional module managed through a CMS
<i>Repeatability</i>	Single	The carrier appears once	One-time branded mission or special screen
	Cyclical	The carrier appears periodically or under specific conditions	Branded loading screen; recurring in-game events
	Permanent	The carrier is available at all times	Persistent branded button, navigation element, or system functionality

Source: Author’s own work

The developed framework provides a foundation for the empirical examination of the relationship between the characteristics of Digital Brand Value Carriers (DBVC), the positioning of brand extensions, and consumer perceptions, with the concept of “virtual in-game assets”, used in the subsequent chapters, representing a derivative and applied manifestation of the Digital Brand Value Carriers concept.

CHAPTER TWO: Methodological And Market Aspects Of Video Game Consumption In Bulgaria Among Generation Z

Chapter Two of the dissertation is structured into three paragraphs and facilitates the transition from the theoretical framework to empirical analysis, focusing on the application of the developed concepts in the context of video games as an environment for positioning brand extensions among Generation Z in Bulgaria. Within the chapter,

the research methodology is systematized and presented, and the rationale behind the applied research approaches is substantiated. The characteristics of the Bulgarian video game market are examined, and the author-developed algorithm for analyzing and evaluating brandable in-game assets is presented and applied to a selected sample of video games.

1. Methodology for Researching and Analyzing Opportunities for Positioning Brand Extensions

The conducted theoretical review and the identified conceptual relationships necessitate the implementation of a sequential system of empirical studies aimed at achieving the objectives of the dissertation. Within **Paragraph 1.1**, the conceptual research model (Figure 3) is presented, integrating positioning theory, brand extension theory, and the generational perspective, and substantiating the rationale for examining video games as a communication environment for positioning brand extensions among Generation Z.

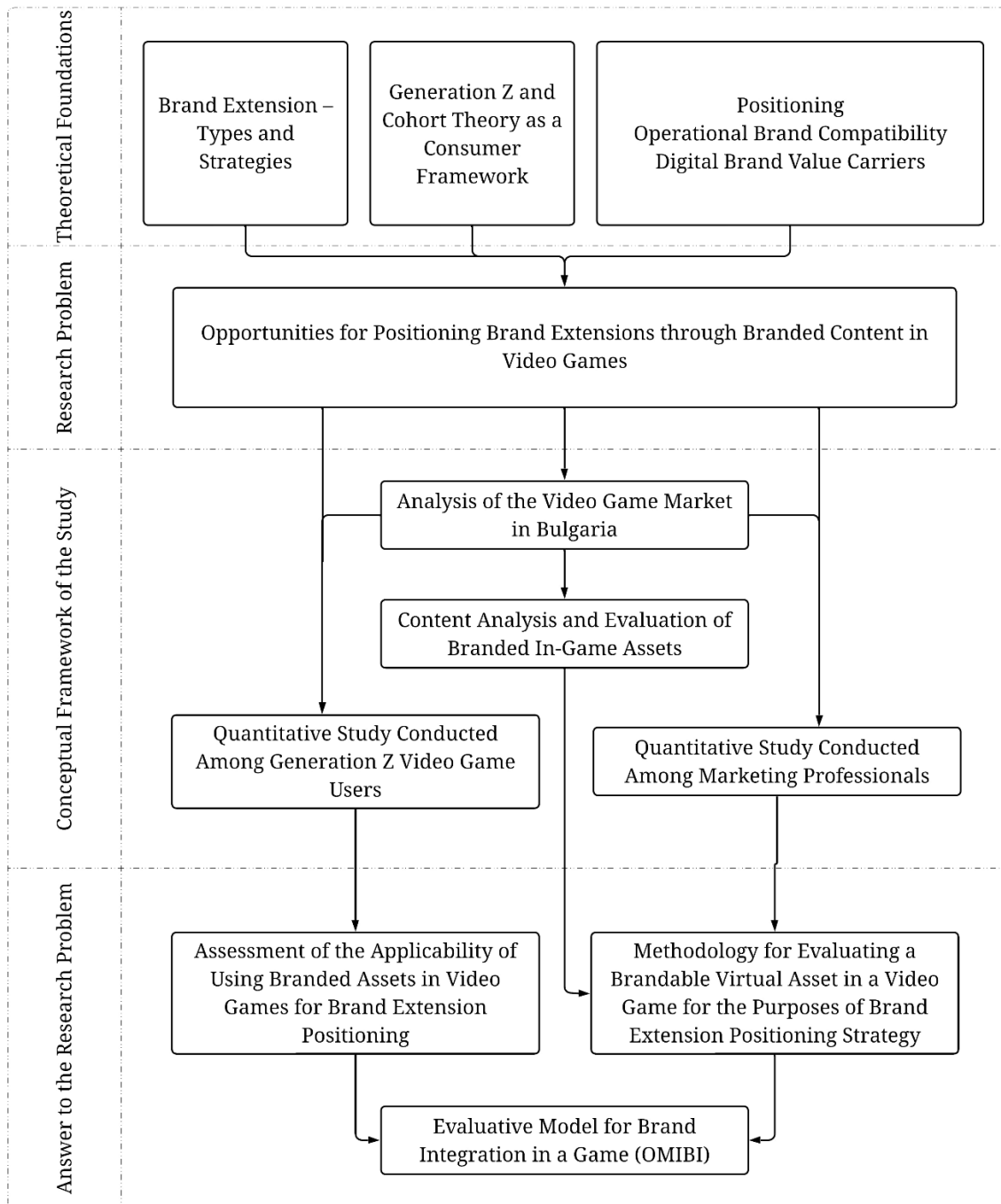


Figure 3. Conceptual Framework of the Dissertation

Source: Author's own work

Based on this model, a multi-stage methodology is developed that combines secondary and primary data and applies both qualitative and quantitative methods. The research process and the sequence of individual stages are presented, with a detailed description of the data sources, the methods employed, and the logic behind their integration (Table 2). The methodology includes desk research, in-depth interviews,

quantitative survey research, and a content analysis of brandable in-game assets using an author-developed evaluation algorithm.

Table 2.

Information Support of the Dissertation

Stage	Type of Research Conducted	Main Objectives
Stage 1	Desk research	<ul style="list-style-type: none"> • Analysis of secondary data on video game types and models for brand positioning within them • Collection and analysis of secondary data on the Bulgarian video game market, including the profile of Bulgarian consumers
Stage 2	In-depth interviews	<ul style="list-style-type: none"> • Conducting interviews with representatives of the marketing community in Bulgaria • Conducting interviews with end users (Generation Z gamers)
Stage 3	Content analysis	<ul style="list-style-type: none"> • Development of an algorithm for categorizing and evaluating brand assets in video games • Application of the algorithm through content analysis of existing brand integrations
Stage 4	Quantitative study among Generation Z video game users	<ul style="list-style-type: none"> • Comparative analysis of trends between Bulgarian and international video game consumers • Assessment of attitudes toward the positioning of brand extensions through in-game assets (IGA)
Stage 5	Quantitative study among marketing professionals in Bulgaria	<ul style="list-style-type: none"> • Assessment of awareness regarding the opportunities for using branded content in video games • Assessment of attitudes toward the positioning of brand extensions through in-game assets (IGA)

Source: Author's own work

Paragraph 1.2 provides a detailed examination of the survey instruments used, including their structure, construction logic, and the connection to the theoretical constructs embedded in the research model. The measurement scales, indicators, and the way individual questions operationalize key concepts-such as perceived similarity, integration relevance, exposure, risk, and attitudes toward brand extensions-are presented. The choice of questionnaires as the primary tool for collecting quantitative data is justified, along with their applicability to the two target groups: Generation Z gamers and marketing professionals.

Overall, the applied methodology provides empirical testability of the research thesis and enables the development of a practical model for the ex ante assessment of the relevance and effectiveness of integrating brand extensions into video game environments. It unifies the analytical, market, and applied perspectives of the study and establishes a foundation for formulating the findings and contributions presented in the subsequent sections of the dissertation.

2. Video Games in Bulgaria: Market and Opportunities for Brand Positioning

The rapid evolution of video games establishes them as a significant digital platform for interactive marketing communications with high potential to reach Generation Z. The analysis of the structure and behavior of Bulgarian gamers highlights the key prerequisites and constraints for successfully positioning brand extensions in video games as an innovative communication channel.

Within **Paragraph 2.1**, the evolution of video games as a communication channel is traced, covering technological, market, and behavioral transformations that expand the opportunities for brand integration over time (Kerr, 2017; Wolf, 2012). It is shown that video games have evolved from an entertainment medium with limited communication potential into a complex digital platform enabling static and dynamic in-game advertising, advergames, and branded virtual assets (Newman, 2013; Bogost, 2007; Schneider, 2012). A comparative analysis with other communication channels highlights the high level of interactivity, emotional impact, and precision targeting that distinguish video games as an environment for brand communication (Sjöblom & Hamari, 2017; Taylor, 2018).

In addition, the typology of video games and gamer segmentation is examined as a key prerequisite for the strategic planning of brand communications in video game environments. Genre-based, platform-based, and business-model classifications of video games are presented, noting that different genres and monetization models imply varying communication and brand potential (Apperley, 2006; Wolf, 2012; Hamari & Lehdonvirta, 2010; Paavilainen, 2017). The analysis emphasizes the importance of psychographic and behavioral segmentation of gamers, including Yee's motivational

model, as a tool for more precise targeting and increased relevance of brand integrations (Yee, 2006; Yee, 2016).

In Paragraph 2.1.3, the main models of brand integration in video games are systematized, taking into account their increasing complexity due to technological development and changing consumer expectations. Key forms of integration are distinguished-static and dynamic in-game advertising, advergames, product placement, sponsorships, and branded virtual assets-with their specific features, advantages, and limitations analyzed in the context of the gaming experience.

The paragraph concludes that the effectiveness of each model depends on the degree of fit between the brand, the game context, and consumer motivations, as well as on the perceived authenticity and unobtrusiveness of the communication. Based on empirical research, it is argued that video games can support the formation of both explicit and implicit brand associations, with positive effects on brand recall and attitudes being more likely when there is high coherence between the brand and the game (Nelson, 2002; Lee & Faber, 2007; Martí-Parreño et al., 2013).

In Paragraph 2.2, the market context of video games in Bulgaria is analyzed as a specific digital environment for conducting marketing communications and positioning brand extensions. The size and structure of the market, leading platforms, and consumption trends are examined, with the analysis showing a sustained increase in gaming activity and the dominant role of digital distribution. The data confirm the transformation of video games from an entertainment segment into a communication platform with potential to reach young audiences (Newzoo, 2024; Video Games Europe, 2023).

Within the paragraph, a detailed profile of Generation Z in Bulgaria is outlined as a consumer group characterized by early and intensive digital socialization, high visual literacy, and a preference for interactive and immersive environments. Additionally, the analysis highlights price sensitivity, a critical attitude toward intrusive advertising practices, and heightened sensitivity to authenticity and brand communication context (Priporas et al., 2017; Seemiller & Grace, 2016). These characteristics position Generation Z as an audience with high engagement potential, but with clearly defined requirements regarding the format and logic of brand integration.

Based on the analysis of market and consumer data, key conclusions have been formulated regarding the opportunities and constraints for brands integrating into video game environments. On one hand, video games offer extended exposure, high engagement, and opportunities for contextual positioning of brand extensions. On the other hand, the effectiveness of communication is highly dependent on the alignment between the game context, brand identity, and consumer motivations, with misaligned or overly explicit integrations leading to negative reactions and rejection (Martí-Parreño et al., 2013).

In summary, **Paragraph 2.2** argues that the Bulgarian video game market provides a real, yet conditionally constrained potential for positioning brand extensions. Successful use of video games as a communication channel requires strategic selection of the gaming environment, sensitivity to consumer perceptions, and ex ante assessment of the relevance of brand integration, which logically justifies the need for developing an analytical model for evaluating branded in-game assets.

3. Study of Practices in the Use of In-Game Assets as Carriers of Brand Value

Within **Paragraph 3**, a study is presented with the aim of analyzing the practice of using in-game assets for positioning brand extensions. An author-developed algorithm for the content analysis of video games was created and applied. The results provide the empirical basis for developing a model to assess the potential of brandable in-game assets.

In **Paragraph 3.1**, the author-developed algorithm for categorizing and evaluating brand assets in video games is presented. It was constructed based on market analysis and in-depth expert interviews. The algorithm operationalizes key dimensions of brand integration across three analytical levels-asset characteristics, effectiveness and exposure, and evaluation indicators-using a system of weights and normalized coefficients, enabling comparative assessment of relevance, exposure, risk, and expected success of the integration.

Within **Paragraph 3.1.1**, the stages and variables of the algorithm are systematized. The first stage generates basic information about the analyzed video game,

including genre, platform, sales, and age rating. The PEGI age rating is used as a segmentation criterion to determine the target audience, taking into account control possibilities in physical and digital distribution (PEGI, 2017). The subsequent analytical cycle evaluates the virtual assets in terms of type, dynamism, and industry context, distinguishing between static and dynamic elements and analyzing their strategic advantages and limitations.

The second analytical group includes effectiveness and exposure indicators-duration of perception, visibility, and interactivity-considering the influence of genre and gaming motivation on how brand elements are perceived and interpreted by players. It is shown that interactive and contextually integrated assets have a higher potential for generating positive brand associations, while misaligned or intrusive integrations can lead to negative reactions.

The third group of indicators includes intrusiveness, audience fit, risk of negative perception, and repeatability, which are used to evaluate the overall effectiveness of brand integration. Based on this, a composite percentage score is generated, classifying integrations into three levels of success: low, medium, and high integration. To minimize subjectivity, Cohen's kappa coefficient is applied, with a resulting value of $\kappa = 0.76$, indicating high reliability of the coding scheme (Cohen, 1960; Landis & Koch, 1977).

In **Paragraph 3.1.2**, the procedure for operationalizing the variables is presented, including the determination of relative weights through expert assessments and their normalization within a 0 to 1 range. The main limitations of the algorithm are also noted, related to the use of sales as a proxy for the number of players and the application of the PEGI rating as an indicator of the actual audience, given discrepancies between the official and actual age distribution of players (Nielsen, 2020). Despite these limitations, the algorithm provides a reliable basis for comparative analysis and for preliminary assessment of the potential for positioning brand extensions via in-game assets.

Within **Paragraph 3.2**, a content analysis of practices for integrating brands and brand extensions through in-game assets was conducted, based on the author-developed algorithm and system of operationalized variables. The analysis covers 72 video games released between 2015 and 2025, with the selection of titles targeting genres with high user engagement and significant market reach. The results show that the most frequently

used integration models are static and semi-interactive brandable assets, placed within the game environment in a way that supports realism and continuity of the gaming experience.

The analysis reveals that the majority of brand integrations occur in contexts with a high degree of alignment between the game world, genre, and brand character, which significantly reduces perceived intrusiveness. The data show that integrations functionally or symbolically linked to game mechanics are perceived more positively compared to purely visual advertising elements. This confirms findings in the literature that contextual relevance and the “naturalness” of presence are critical factors for the effectiveness of in-game brand positioning.

For the purposes of systematization and comparative evaluation, four analytical indices were constructed, representing a substantial empirical contribution of the dissertation.

The Integration Success Index shows that integrations with a balanced combination of high relevance, strong exposure, and low intrusiveness achieve the highest values, confirming the need for strategic consistency when positioning brand extensions.

The Brand Exposure Index reveals that high visibility alone does not guarantee a positive effect if it is not accompanied by contextual fit with the game environment and audience.

The Relevance Index reaches its highest values for integrations that align with the game logic, genre, and player motivations, making this index the strongest predictor of positive brand perception.

The Brand Risk Index indicates that risk increases significantly for integrations with high repetition frequency or disruptions to the gameplay experience, which can lead to negative associations and rejection by users.

The correlational analysis between the indices confirms that successful integration is strongly dependent on relevance and moderate exposure, while intrusiveness is directly associated with increased brand risk. The results support the thesis that effective positioning of brand extensions in video games is not a universal process, but a context-dependent strategy requiring alignment between brand identity,

game environment, and consumer expectations. The developed indices and methodology provide a practical tool for ex ante assessment of the potential for positioning brand extensions through in-game assets, with particular relevance for Generation Z audiences.

CHAPTER THREE: Methodological Tool for the Evaluation and Presentation of In-Game Assets for the Purposes of Positioning Brand Extensions among Generation Z

Paragraph 3 is devoted to an empirical study of consumer perceptions and attitudes toward the integration of brand extensions through in-game assets in video games. In the context of the establishment of video games as a complex digital ecosystem influencing consumer behavior and brand perception, the analysis focuses on the role of contextual and genre congruence, visual realism, and the mode of integration for positioning effectiveness. The results obtained serve as a basis for the development of an empirically grounded model for the strategic use of in-game assets in positioning brand extensions among Generation Z.

1. Impact of Branded In-Game Objects on Generation Z's Perceptions

In **Paragraph 3.1**, the profile of the respondents and their exposure to branded in-game assets are analyzed, covering Bulgarian, European, and non-European markets. The data indicate a predominance of males among active gamers and an average gaming intensity of 20.6 hours per week. More than half of the respondents report having noticed branded elements in video games, and when indicative responses are excluded, the share of positive exposure reaches 67.6%, confirming the widespread presence of in-game branding.

The most frequently recognized brand categories are the automotive industry, food and beverages, apparel, electronics, and military equipment, which correspond to the genres in which respondents most often identify brand integrations-namely sports, racing, and simulation games. The convergence between the results of the consumer study and the content analysis confirms that brand exposure and perception are strongly dependent on the fit between the product, the game genre, and the game mechanics, with

contextually justified integrations supporting the formation of positive brand associations.

Paragraph 3.2 presents the results of an empirical study of consumer perceptions toward the integration of real brands and brand extensions through in-game assets, with a focus on Generation Z. The analysis shows that attitudes toward such integrations are not polarized but are strongly context-dependent. For a significant share of respondents, their reaction to brand presence in a video game depends entirely on how the integration is executed, confirming that video games do not function as a universal advertising channel but rather as an environment in which relevance and execution are decisive (Figure 4).

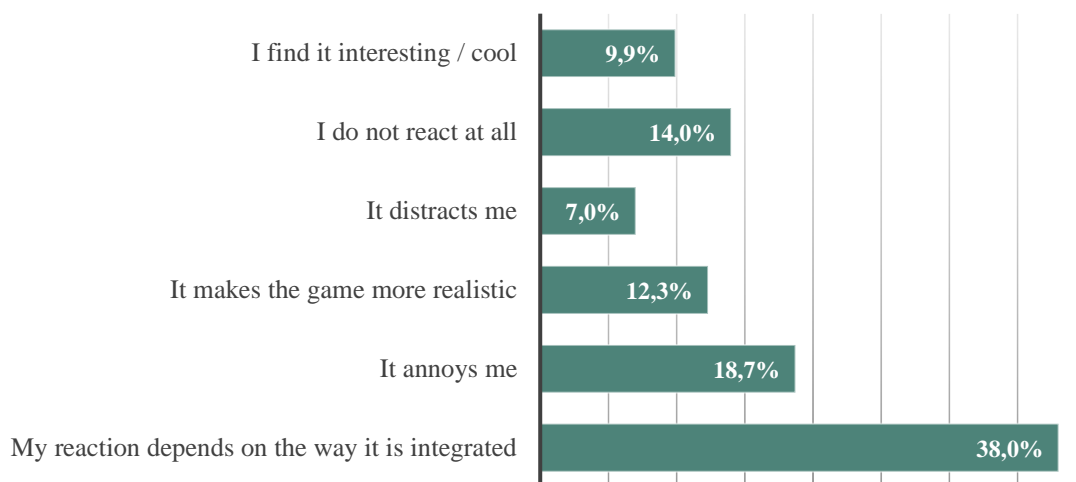


Figure 4. Distribution of Responses to the Presence of a Real Brand in a Video Game

The overall attitude toward video games as a channel for presenting products and services is concentrated around a neutral position. This neutrality should not be interpreted as indifference, but rather as the absence of a prior predisposition “for” or “against” this type of communication. The results indicate that Generation Z does not reject brand integrations in principle, but evaluates them critically and conditionally—depending on whether they enhance or disrupt the gaming experience.

A detailed analysis of the ratings reveals a predominantly neutral to moderately negative attitude combined with high variability, indicating heterogeneity of perceptions. The highest-rated statement relates to the alignment of brand integration with the game’s time period and narrative, clearly identifying contextual and historical authenticity as a

key factor for acceptance. In contrast, statements associated with trust in new products or changes in negative brand perceptions receive the lowest ratings, suggesting that video games tend to build awareness and interest rather than directly foster trust or loyalty.

Within the study, **correlational relationships between key attitudes were tested**, with the results indicating statistically significant, albeit moderate, associations. It was found that a positive attitude toward the presence of everyday products correlates with a tendency to perceive the game as more realistic, as well as with greater openness toward brand extensions and higher trust in new products from familiar brands. This confirms that, under certain conditions, the video game environment can activate positive associative processes despite the overall reserved average evaluations.

Situations in which integration is perceived as acceptable stand out particularly clearly. The highest levels of approval are observed in racing and sports games featuring real brands, as well as when products are functionally embedded within the game world. This confirms the central role of genre and functional congruence. In contrast, the educational or informational value of the integration is evaluated as secondary, indicating that Generation Z perceives video games primarily as a space for experience rather than instruction.

The analysis of negative reactions highlights two main risk factors: lack of alignment with the game context and disruption of gameplay flow. Integrations that resemble external advertising, interrupt gameplay, or are anachronistic in relation to the game's time setting are perceived most negatively. This demonstrates that high exposure does not compensate for the loss of immersion.

Regarding subsequent behavior, more than half of the respondents report having sought additional information about a product seen in a video game, which can be interpreted as an indicator of cognitive interest. However, a significantly smaller share associates video game exposure with a purchase decision or trust in a new product. This confirms the role of video games as an environment for building awareness and associations rather than as a channel for direct behavioral influence.

Particularly high evaluations are given to the realistic representation and the accuracy of the product's visual and functional characteristics, between which a statistically significant correlation is identified (Figure 5). Regarding preferred

integration approaches, functional integration and unobtrusive background presence receive the highest ratings, with a significant relationship also established between them.

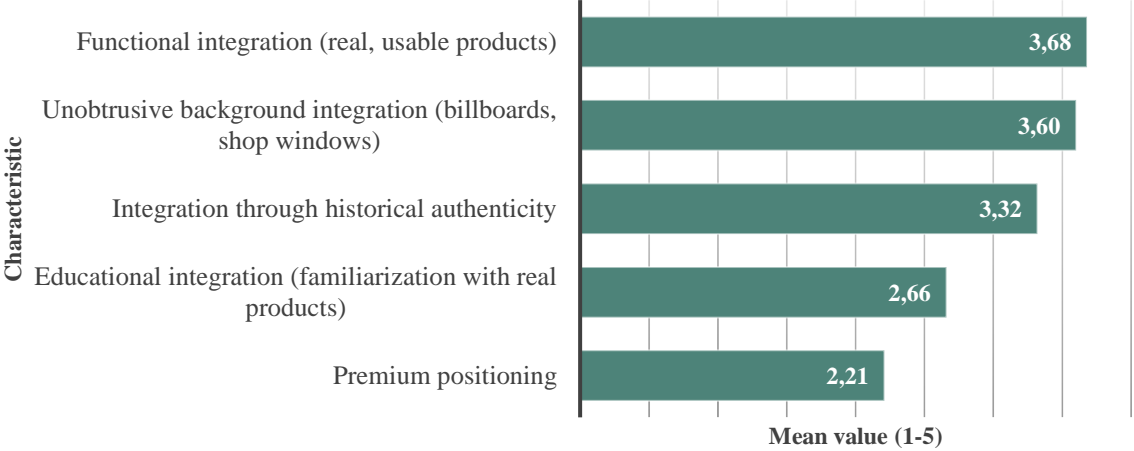


Figure 5. Effectiveness of Different Approaches to Brand Integration in a Video Game

In summary, the results indicate that the effectiveness of positioning brand extensions through in-game assets is strongly dependent on contextual congruence, unobtrusiveness, and realism of the integration. Video games are not a universal solution for brand communication, but with strategic selection and careful execution, they can function as an effective environment for building lasting associations and interest among Generation Z.

Paragraph 1.3 presents the tested hypotheses and the discussion of the study results. The validation of the hypotheses shows that the perception of in-game branded assets among Generation Z is highly contextual and does not depend on the mere presence of brand integration, but on how it is implemented. Respondents perceive brands as part of the gaming experience rather than as standalone advertising messages, which positions relevance and integration within game logic as the leading evaluation factors. The tested correlations confirm that perceived realism and contextual congruence are more influential for attitudes toward brand extensions than the frequency of exposure.

Statistically significant, though moderate, relationships are identified between brand recognition and perceived realism of the integration, as well as between realism and overall attitudes toward branded content. Contextual congruence exerts a positive

but weaker influence, indicating that visual presence alone is insufficient for effective positioning. In contrast, the hypotheses related to direct behavioral effects-trust in a new product and immediate purchase intention-are not confirmed, outlining the indirect and long-term nature of the impact.

The results show that the effectiveness of brand integrations does not depend on their specific form (functional or background), but on the extent to which they are organically embedded in the game environment. The analyses do not reveal a clearly dominant effect of individual visual or contextual factors, confirming their combined nature. At the same time, the comparative analysis across age groups indicates a higher openness of Generation Z toward brand extensions in video games, reinforcing its strategic importance as a target audience.

The qualitative interpretation reveals internal polarization among respondents. Some perceive brand integrations as a disruption of the escapist function of video games, while another group accepts contextually appropriate and functional integrations as a factor enhancing realism. Behavioral data complement this conclusion, showing that video games more often stimulate information seeking and cognitive interest rather than direct purchase decisions.

In summary, the study confirms that positioning brand extensions through in-game assets requires a strategic balance between visibility and authenticity. Effective integrations are those that align with the game's genre, mechanics, and internal logic and contribute to the gaming experience rather than disrupt it. These findings serve as an empirical foundation for the development of the author's model for assessing the potential of brandable in-game assets.

2. Marketing Perspectives for Positioning Brand Extensions through Brandable Assets in Video Games

Paragraph 2.1 analyzes marketing professionals' perceptions of video games as a potential communication channel for positioning brand extensions in the context of digital transformation. The data indicate that although video games do not yet occupy a significant place among actually used marketing channels, organizations are strongly focused on audiences that overlap with the most active gaming users-particularly

Generation Z. This highlights a strategic mismatch between targeted audiences and the communication tools currently employed.

A total of 54 marketing professionals with diverse professional backgrounds and an average of over 10 years of work experience were surveyed, representing organizations of varying size and sectoral affiliation, predominantly from digitally oriented industries. The analysis of target audiences shows a clear prioritization of the 18–26 and 27–42 age groups, which include representatives of Generation Z. For more than half of the respondents, this generation is either the primary or one of the leading target groups, confirming its strategic importance for long-term consumer value creation.

Despite this focus, the marketing channels in use remain concentrated around established platforms such as websites, Facebook, YouTube, Google Ads/SEO, and email marketing, while channels more strongly associated with Generation Z, such as TikTok and Instagram, are used to a more limited extent. The tested correlations between age groups and digital platforms (Table 3) reveal statistically significant relationships between Generation Z and the use of TikTok and Instagram, as well as between YouTube and TikTok, reflecting multiplatform practices of adapting and reusing video content.

Table 3.

Correlation Coefficients between Age Groups and Digital Platforms

Indicators	13-17	18-26	TikTok	Instagram	YouTube
13-17		0,293*	0,860	0,714	0,538
18-26	0,293*		0,223	0,410	0,158
TikTok	0,860	0,223		0,680	0,544
Instagram	0,714	0,410	0,680		0,507
YouTube	0,538	0,158	0,544	0,507	

Table 3 confirms that the surveyed organizations demonstrate a good understanding of the digital habits of younger audiences and follow current communication trends. It is precisely this context that makes video games a logical yet still underutilized extension of existing digital strategies, particularly when targeting Generation Z. The results of this paragraph substantiate the need for a more in-depth

examination of video games as an environment for the strategic positioning of brand extensions, which is the focus of the subsequent sections of the doctoral dissertation.

Paragraph 2.2 analyzes the level of awareness, professional attitudes, and strategic evaluation of marketing specialists toward the integration of brands and brand extensions in video game environments. The results show that although this approach is not yet widely applied, it is relatively well known: more than half of the respondents are at least partially familiar with the concept, and nearly one fifth demonstrate active professional interest. The data for brands and brand extensions are similar, indicating that practitioners perceive them as closely related strategies, but with a higher perceived risk for extensions due to associative transfer.

The most recognizable integration formats are branded in-game objects and virtual advertising boards, while more complex formats such as sponsorships and influencer collaborations are identified far less frequently. The absence of significant differences between better- and less-informed respondents suggests that awareness of these formats stems more from gaming experience than from systematic strategic planning.

The evaluation of potential benefits positions video games as a channel with high strategic value-particularly in terms of competitive differentiation, reaching younger audiences, and enabling engaging brand interaction. At the same time, indicators such as measurability, cost efficiency, and content control receive lower evaluations, outlining the key tension between the strategic potential and the operational applicability of this approach.

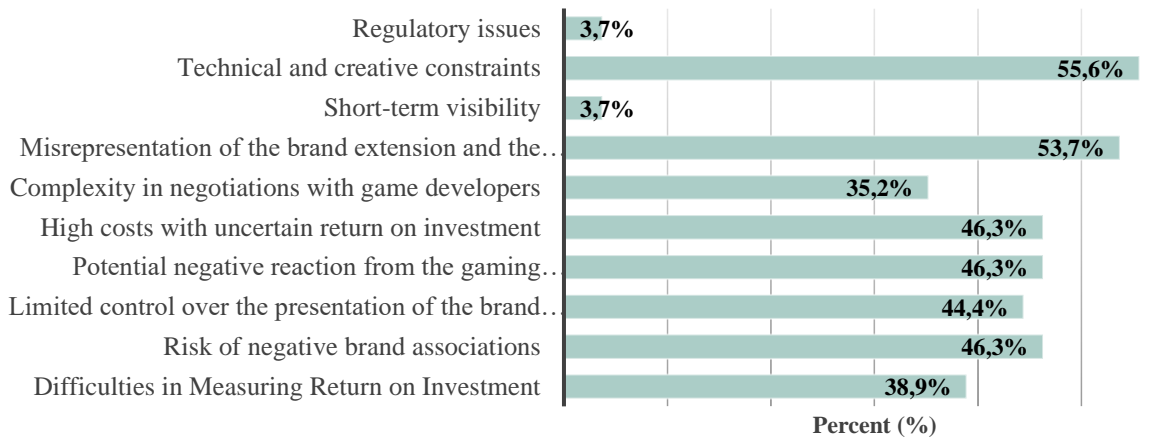


Figure 6. Challenges and Risks in Integrating Brand Extensions into Video Games

Figure 6 visualizes the factors that most strongly constrain the practical application of the strategy-risk of negative reactions from the gaming community, misalignment with the game context, high costs, and limited managerial control.

Professional attitudes toward such integrations are predominantly positive, with over 80% of respondents evaluating them as a good or very good marketing opportunity, provided that they are applied in a contextually and strategically justified manner. Compared to other digital channels, video games are perceived as more engaging and memorable, but less predictable and more difficult to measure, which leads to the predominant use of indirect KPIs.

In conclusion, the results outline the integration of brand extensions in video games as a strategically promising yet methodologically and organizationally immature tool. The recognized potential, combined with clearly identified risks, substantiates the need for the development of a structured model for evaluating and managing brandable in-game assets, as proposed in the subsequent parts of the doctoral dissertation.

Paragraph 2.3 tests a series of hypotheses aimed at identifying the factors that shape professional perceptions and the willingness to use brandable in-game assets for positioning brand extensions. The results outline a contradictory yet conceptually coherent picture in which the high strategic potential of video games coexists with pronounced managerial and cultural uncertainty.

The results do not confirm the assumption that greater professional experience leads to higher familiarity with video game integrations. On the contrary, an inverse

statistically significant relationship is identified, indicating that more experienced professionals are more skeptical or cautious toward new and weakly institutionalized channels. This can be interpreted as an effect of established professional routines and an orientation toward tools that are more measurable and easier to manage.

In contrast, the hypothesis that organizations using innovative digital channels (TikTok, influencer marketing, mobile advertising) are significantly more open to video games as a marketing channel is clearly confirmed. This result indicates that digital maturity, rather than age or professional experience, is the key mediator of innovative attitudes.

The hypothesis that lack of knowledge and uncertainty regarding return on investment are the leading factors behind the refusal to use brandable in-game assets is also unequivocally confirmed. The data show that even with a positive attitude toward the concept, the absence of control and clearly measurable indicators hinders its implementation in a real strategic environment.

A particularly important result for the doctoral dissertation is the confirmation of the relationship between perceived applicability and the alignment between industry sector and game genres. This empirically supports theoretical propositions regarding perceived fit between brand and gaming context (Lee & Faber, 2007) and demonstrates that the effectiveness of integrations is contextual rather than universal.

From a discussion perspective, the results reveal a clear tension between perceived value (engagement, immersion, emotional transfer) and perceived risk (loss of control, negative associations, cultural mismatch). Marketing professionals recognize video games as an environment for deep experience and co-creation of meaning, while simultaneously emphasizing the instability of brand representation in game worlds dominated by user behavior.

The correlations between positive evaluations of integrations and belief in their future development indicate a paradigmatic shift—from interruptive to immersive communication models. For Generation Z, which operates within a hybrid physical–digital environment, the branded in-game asset is perceived not merely as advertising, but as a sociocultural artifact, part of the avatar’s and the community’s identity.

In conclusion, the study demonstrates that the limited practical application of brandable in-game assets is not the result of a lack of potential, but rather of insufficient manageability, predictability, and analytical tools. This substantiates the need for the development of a formalized model for assessing relevance, risk, exposure, and expected impact-the central contribution of the present doctoral dissertation.

3. Model for Evaluating a Brandable In-Game Asset in a Video Game for the Purposes of Brand Extension Positioning

Paragraph 3 presents the evaluative model for brand integration in video games (OMIBI⁷), developed on the basis of theoretical constructs from brand extension theory, generational theory, and interactive marketing. The model operationalizes these concepts through a checklist of 60 evaluative statements measured on a five-point Likert scale, grounded in both theoretical insights and the results of the conducted quantitative studies.

Three additional indices, initially derived through content analysis of video games, are also adapted to the main instrument. As a result, an applicable analytical tool is proposed that supports marketing professionals in assessing the relevance and strategic potential of integrating brandable in-game assets for the purposes of positioning brand extensions.

Paragraph 3.1 presents the structure of the developed evaluative model for brand integration in video games (OMIBI), created in response to the growing complexity of positioning brand extensions in interactive and multilayered digital environments. The model is conceptualized as a modular and adaptive managerial framework designed to support strategic decision-making by integrating theoretical propositions from brand management, generational theory, and interactive marketing into an applicable analytical tool.

At the core of OMIBI, six key constructs are identified, encompassing the entire process of integrating a brand extension into a video game-from the symbolic and thematic fit between the brand and the game world, through consumer and gaming

⁷ The Bulgarian acronym "ОМИБИ" (OMIBI) is retained in the English translation for euphony and has been transliterated rather than translated

community perceptions, strategic and positional alignment with the parent brand, to the impact on the gaming experience, economic justification and reputational risks, as well as the exposure and interactive parameters of the integration. These constructs form the conceptual framework of the model and are structured to reflect the logical sequence of the brand extension positioning process within a video game environment.

OMIBI is operationalized through six sequential stages implemented in a checklist of 60 measurable statements, assessed on a five-point Likert scale. This structure enables both systematic analysis and practical applicability, facilitating comparison across different video games, genres, and brand extensions. In this way, the model extends the traditional checklist approach by transforming it into a comprehensive evaluative architecture that minimizes the risk of overlooking key strategic and contextual factors.

Table 4.

OMIBI Elements and Corresponding Indices

OMIBI Element	Corresponding Index	Relationship
Brand relevance	Relevance index	Relevance directly reflects the degree of cognitive and symbolic congruence
Consumer perception	Relevance index	Community acceptance is largely determined by perceived significance and authenticity
Strategic and positional fit	Relevance index	Strategic consistency depends on contextual and semantic congruence
Game environment and suitable experience	Brand risk index	Intrusiveness and disruption of flow constitute experience-related risk
Risk assessment and economic factors	Brand risk index	Reputational and ethical risks influence managerial viability
Financial, exposure, and interaction factors	Brand exposure index	Visibility and interaction determine the quantitative value of communication

Source: Author’s own work

The calibration of OMIBI is carried out through three indices, initially derived within the framework of a content analysis of video games and subsequently adapted to

the structure of the checklist: a **relevance index**, a **brand risk index**, and a **brand exposure index** (Table 4). These function as weighting mechanisms that integrate the symbolic, consumer-related, and financial dimensions of in-game integration, thereby providing the model with greater analytical sensitivity.

In addition, a composite Brand Integration Suitability Index (BISI) is introduced, which aggregates the evaluations across the six dimensions and provides a quantitative assessment of the strategic feasibility of a specific integration. Through this indicator, the model enables a clear distinction between different scenarios-integrations with high relevance but low visibility, cases of overexposure without legitimacy, as well as situations with high potential but elevated reputational or contextual risk.

In this way, OMIBI does not function solely as a tool for preliminary assessment, but as a strategic framework for managing the process of integrating brand extensions into video games. The model provides brand managers and marketing teams with the ability to make informed choices that take into account the gaming context and consumer perceptions, as well as long-term brand strategy and risk management.

Paragraph 3.2 presents the information base and the logic of the evaluative indices through which the OMIBI model is operationalized. For the purposes of index calculation, a specialized checklist has been developed, intended not for end users but as a diagnostic tool for internal use by marketing professionals and, in certain cases, video game developers. The checklist supports strategic assessment and managerial decision-making, as it does not aim to measure consumer attitudes but rather to provide a preliminary evaluation of the relevance, risk, and potential of the integration.

The checklist is structured into six groups of elements (Figure 7), corresponding to the six key stages in the process of integrating a brand extension into a video game—from symbolic and thematic congruence to economic and exposure parameters. The total number of elements is 60, each evaluated on a five-point Likert scale. In developing the instrument, four guiding principles were followed: comprehensiveness, clarity, a balance between objective and interpretative criteria, and the ability to ensure scalability and comparability across different projects and business contexts.

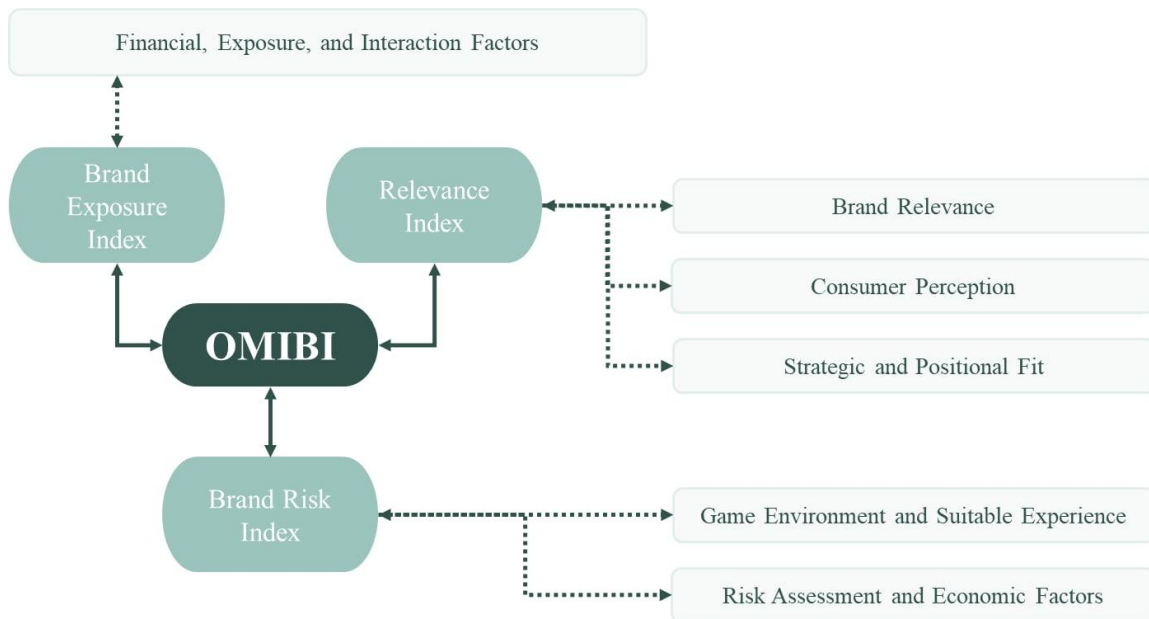


Figure 7. OMIBI checklist structure

Source: Author's own work

The first group of elements assesses the relevance of the brand in relation to the game world and operationalizes the concept of perceived fit adapted to virtual environments. It analyzes the thematic, visual, symbolic, and emotional congruence between the brand extension and the game, where higher scores indicate a greater likelihood of positive acceptance and effective transfer of brand associations, while lower scores signal potential conceptual dissonance and player skepticism.

The second group focuses on consumer and community perceptions, with an emphasis on Generation Z and gaming culture. It evaluates the expected authenticity of the integration, cultural alignment, the likelihood of positive or negative public discourse, and the potential for organic diffusion through user-generated content. Low scores in this group are interpreted as indicators of elevated reputational risk, even in cases of a conceptually well-designed integration.

The third group analyzes the strategic and positional fit between the brand extension and the parent brand, examining the extent to which the integration aligns with long-term brand strategy, communication tone, and target audiences. This group addresses the risk of brand identity dilution, which can arise even when the brand and game context are otherwise well-matched.

The fourth group focuses on the gaming experience and the degree to which the integration contributes to player immersion rather than disrupting it. It evaluates the fluidity of the integration with game mechanics, visual and auditory coherence, timing of appearances, and the impact on the overall experience.

The fifth group covers economic and risk factors, evaluating expected profitability, implementation complexity, licensing constraints, and potential reputational risks. It ensures that even conceptually appropriate integrations are considered through the lens of managerial and financial feasibility.

The final group includes exposure and interactive metrics, related to frequency of display, level of user interaction, potential for repeated exposure via streaming and video content, as well as indicative performance measures such as cost per impression.

In summary, the checklist accompanying the OMIBI model represents a comprehensive and structured framework for assessing the potential for integrating brand extensions into video games. By combining symbolic, consumer, strategic, and economic dimensions, it enables systematic managerial decision-making, risk minimization, and comparison across different integration scenarios. In this way, the model goes beyond serving as a preliminary assessment tool and establishes itself as a strategic foundation for planning and managing brand presence in video game environments.

Paragraph 3.3 demonstrates the practical operationalization of the OMIBI model through a hypothetical scenario involving the integration of an eco-innovative brand extension into an open-world RPG video game. By systematically applying the six groups of checklist criteria, the model illustrates how theoretical propositions are transformed into measurable managerial assessments, enabling a preliminary evaluation of the relevance, risk, and expected impact of the integration. High scores across individual dimensions and on the composite Brand Integration Suitability Index (BISI) illustrate how quantitative results can be interpreted as clear strategic recommendations.

A key contribution of this operationalization is the transformation of the three indices derived from content analysis into a predictive managerial tool. By shifting from a descriptive to an evaluative logic, the model allows for scenario comparison,

identification of key risks, and optimization of strategic decisions, establishing OMIBI as a practical framework for positioning brand extensions in video game environments.

In summary, this paragraph confirms that through a clear structure, measurable indices, and the capability for scenario analysis, the OMIBI model successfully bridges the gap between theory and practice, providing a reliable tool for preliminary assessment and management of brand integrations in interactive digital ecosystems.

CONCLUSION

The conclusion of the doctoral dissertation confirms the relevance and significance of the research topic, which addresses the positioning of brand extensions in video game environments as a specific digital context of brand interaction. Based on the conducted theoretical review, the comprehensive empirical studies, and the development of original analytical tools, the author confirms the fulfillment of all research objectives and tasks outlined in the introduction.

The dissertation substantiates the author's thesis that the positioning of brand extensions in video games should not be viewed as an isolated communication tactic, but rather as a strategic process requiring alignment between brand characteristics, the gaming context, and the specific features of the target audience, particularly Generation Z. The research demonstrates that the effectiveness of such integrations depends less on formal similarity to the core brand and more on their contextual and functional appropriateness in relation to game logic and user experience.

Through the introduction of the concept of "Digital Brand Value Carriers" and the development of the OMIBI evaluation model, the dissertation proposes an original conceptual and methodological framework for the preliminary assessment of the potential for integrating brand extensions in video game environments. The validation of the model and the use of an index-based approach demonstrate its applicability as a managerial tool that supports informed strategic decision-making and minimizes the risks of ineffective or counterproductive positioning.

In conclusion, the author finds that video games are becoming an important and distinctive digital environment for building brand value, in which interactivity,

immersion, and cultural context play a key role in the perception of brand extensions. The developed framework and the OMIBI model create opportunities for further development and application in both academic research and practice, including integration with AI-based analytical solutions and expansion to other digital platforms and consumer generations.

IV. STATEMENT OF CONTRIBUTIONS OF THE DOCTORAL DISSERTATION

The theoretical contribution of the doctoral dissertation consists in enriching research in the field of brand extension by analyzing the creation of brand extension value within video game contexts characterized by high interactivity and active user participation. In this regard, the concept of “Digital Brand Value Carriers” (DBVC) is introduced, proposing a new theoretical framework for interpreting video games as carriers of brand extension value.

The methodological contribution is related to the development and application of an original methodology for content analysis of branded elements in video games, based on a systematized set of indicators and analytical tools.

The practical and applied contribution of the dissertation is the development and operationalization of an evaluative model for brand integration in video games, intended for the preliminary assessment of the positioning potential of brand extensions in video games at the stage of conceptual planning and development of the game asset.

V. PUBLICATIONS RELATED TO THE DOCTORAL DISSERTATION

Scientific Articles

1. Kostov, A., 2020. Effectiveness of video advertisements in free mobile games in the Generation Z market segment. Knowledge - International Journal Scientific Papers, Volume 38, pp. 1259-1265.

2. Kostov, A., 2020. Influence of Computer Games as an Advertising Medium on Brand Associations, Journal of Emerging Trends in Marketing and Management, The Bucharest University of Economic Studies, vol. 1(1), pages 54-60.

Conference Papers / Scientific Reports

1. Kostov, A. (2020). Application of Photogrammetric Technology for the Purposes of Brand Positioning. Economic Science, Education and the Real Economy: Development and Interaction in the Digital Era, Science and Economics, Vol. 1, pp. 679–690.

VI. DECLARATION OF ORIGINALITY

I hereby declare that the doctoral dissertation entitled “Opportunities for Positioning Brand Extensions among Generation Z” is entirely my own original work, and that no publications or materials by other authors have been used in violation of their copyright.