FACTORS INFLUENCING CONSUMER BEHAVIOR IN GAMING INDUSTRY: EVIDENCE FROM RUSSIAN MARKET

Master's Thesis by the 2nd year student
Concentration   – International Business
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АННОТАЦИЯ

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Описание цели, задач и основных результатов	Индустрия видеоигр или разработка, издание и продвижение игр является одной из самых быстрорастущих ИТ-индустрий и индустрий развлечений в мире. В то время как большая часть академического внимания к видеоиграм до сих пор сосредоточена вокруг потенциального негативного воздействия, которое они потенциально могут оказать на психическое состояние человека, изучение игр с точки зрения бизнеса, в частности, исследования поведения потребителей, имеют большой потенциал. Данное исследование направлено на эмпирическое изучение взаимосвязи между мотивацией, вовлеченностью в видеоигры и намерением совершить покупку, с целью интерпретировать полученные данные в интересах как и создателей игр, так и потребителей. В результате этого исследования было установлено, что вовлеченность выступает в качестве посредника между игровой мотивацией потребителя и намерением совершить покупку.
Ключевые слова	Поведение потребителей, намерение по покупке, мотивация

ANNOTATION

Master Student's Name	Mashkovskaia Vladilava
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Educational Program	Master in Management
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Description of the goal, tasks and main results	Video game industry or development, publishing and promotion of games is one of the fastest growing IT and global entertainment industries. While most of academic attention around video games to this day revolves around the potential negative effect it allegedly can cause on an individual's mental state, business perspectives, specifically, consumer behavior research, still have a lot of potential. This study aims to empirically examine the relationship between motivation, video game engagement and purchase intention in order to interpret and implement those patterns for the benefit of both gaming businesses and customers. As a result of this research it was established that engagement acts as a mediating factor between consumer's motivation to play and purchase intent.
Keywords	Consumer behavior, purchase intent, motivation

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Introduction

Topicality. Video game industry or development, publishing and promotion of games is one of the fastest growing IT and global entertainment industries. In 2020, the global gaming market reached a value of 168 billion dollars, surpassing cinema and sports industries in the United States combined, and is set to reach a value of almost 300 billion dollars over the next five years (Market Watch, 2021). While the pandemic has influenced game development processes and gaming companies modes of operation, it has not fundamentally changed the market and behavior of gaming products consumers, but rather accelerated positive growth trends already seen previously. Newzoo (2021) researchers report that last year socialization was one of the main drivers behind consumer's decision to engage in video games. This outcome stems from the continuous self-isolation measures that urged people to stay at home and cut intersocial interactions while encouraging them to seek socialization elsewhere, which resulted in an influx of new video games players across all platforms, gaming engagement spike and entertainment spending growth. Even though it currently does seem unlikely that previous year's record-breaking numbers would remain throughout 2021, researchers still expect the global gaming market to show sustainable growth with approximately 2.8 billion players generating revenues of 189 billion dollars - a 19% increase compared to the previous period (Newzoo, 2021).In 2020 global gaming industry exceeded in revenue movies and music industries combined; Russian gaming market is forecasted to reach 328 bln rubles by 2024 (Insider, 2020).

Research gap

Video games can be considered a relatively new area of research and practice. The first attempts to comprehend virtual computer games were made in the 1980s, however, despite the tremendous speed of propagation, this phenomenon has not been studied deeply enough at the time. According to Games Studies journal editor Espen Aarseth, the start of game research as a systematic and critical production of academic knowledge happened no earlier than the year 2001. It is referred to as year one of the video game studies field becoming an emerging and viable scientific discipline. This year marks the first ever scholar conference where questions of computer games' cultural impact and scientific significance became the center of academic attention. Later that year, several renowned graduate university programs took a step to become pioneers in adopting computer game studies as a part of regular curriculum (Egenfeldt-Nielsen et al., 2013)

The initial concern with academic viability of video games studies came from the challenge of separating it from the existing media and new-media fields of study as an independent discipline (Espen, 2001). In her 2004 article titled «Textual Theory and Blind Spots in Media Studies» Liv

Hausken defined the attempts to view and analyze movies, literature and video games as one new-media entity by the term of «media blindness», stating that it can lead to neutral and non-detailed scientific theories on vastly differentiated media (Hausken, 2004). It became more and more clear that video games were in the league of their own when compared to other media formats.

The modern field of video games research stems from ludology, an umbrella term that defines game studies as a whole. While academic discussion on gaming and its consumers has been steadily developing over the past years, there still are many research gaps left. Far more research has focused on other entertainment categories, such as consumers' attitudes toward cinema, music or television (Marchand and Hennig-Thurau, 2013). Thus, marketing research contributions lag slightly behind the actual video game industry practices. Additionally, most of the current existing academic attention is focused on various negative psychological consequences of video game adoption. The psychological mechanisms mediated by computer game activity aspects are described in the works of K. Yang, K. Anderson, L. Canter, S. Olson. While scholars actively discuss video gaming activities and its influence on individuals from technological, educational and sociological points of view, business perspectives, specifically, consumer behavior research, still have a lot of potential due to the fast-paced development nature of the industry (Michaud,2016). In this research, the questions of gaming motivations, its connections with consumer gamer's engagement and how that influences purchase intention are analyzed.

Research problem.

Russian gaming market currently has massive potential as a digital entertainment industry. Being able to articulate in what way behavioral factors influence Russian video game consumers' purchase decision making process and what are the reasons behind this behavior, can provide an important foundation to other adjacent avenues of research, as well as provide an opportunity to interpret and implement those patterns for the benefit of both gaming businesses and customers.

The research *object* of this study is people who play and purchase video games on consoles or personal computers. The *context* of this research is Russia. The research *subject* is factors influencing consumer purchase intention in the gaming industry.

The research goal of this master thesis is to define the relationship between motivations to play games, gaming engagement and consumer's decision to buy a video game. To fulfill this goal, theoretical, methodological and empirical objectives were formulated for this study:

Theoretical objectives:

1. To identify features and peculiarities of the video game market, especially in Russia.
2. To review and analyze relevant theories and concepts in consumer behavior, motivation and engagement areas of study.
3. To identify key motivational factors in the context of game design and marketing in the video game market.
4. To establish the connection between the described motivational factors, engagement and purchase intent and to prove their theoretical relevance for this study.

A methodological objective of this thesis is to compose a questionnaire in order to develop an understanding of different factors influencing Russian consumers to purchase video games. The empirical objectives are of this research are:

1. To identify the relationship between motivation factors of playing games, gaming engagement and customer's intent to purchase video games.

2. To evaluate the role of motivation, engagement and gamer's decision to commit to a video game purchase.

This master thesis consists of an introduction, three chapters and a conclusion. The structure of the thesis is determined by the set objectives. The work was divided into six major stages. During the first stage, review of academic literature dedicated to consumer behavior, gaming motivations and engagement was conducted. Second stage was dedicated to formulation of research questions based on literature review:. *RQ1*. How gaming motivation factors influence engagement of Russian video game consumers?

RQ2. What is the role of engagement in the relationship between gaming motivations and purchase intentions in Russian gaming industry?

RQ3. How attitude towards purchasing games, subjective norms and perceived behavioral control influence purchase intent of Russian video game consumers?

The third stage included the overview of the overall state of the gaming market through the analysis of its structure, main competitors and recent industry developments and trends. According to formulated research questions, the research methodology was designed, the questionnaire was developed, the respondents' selection criteria and main channels of questionnaire distribution were determined. The fifth stage involved response collection and data analysis. During the six stage, obtained results were analyzed in terms of its theoretical and managerial applicability, implications for business were formulated, and major conclusions were defined.

Chapter 1. THEORETICAL FOUNDATIONS OF CONSUMER BEHAVIOUR IN GAMING INDUSTRY

The first chapter presents the basic concepts of the study, examines theories on consumer behavior on digital platforms, discusses the evolution of ideas in the field consumer motivation through game design mechanics, as well as establishes concepts of flow theory and engagement in the context of game purchase intention.

1.1 Models of consumer behavior in an online context

Consumer behavior reflects the totality of consumers' decisions with respect to the acquisition, consumption, and disposition of goods, services, activities, experiences, people, and ideas by decision-making process over time (Hoyer et al, 2012). Consumer behavior as a research discipline that is defined as the study of how individuals, groups, and organizations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and wishes. It can be generally described as consumer's actions about an attitude object (Solomon M., 2006).

Academic interest in the study of consumer behavior has contributed to the development of several approaches. However, despite the rapid growth and development of consumer behavior research, there are many discussions as to what their ultimate goals are and how they differ from similar studies, therefore, there is no singular generally accepted theoretical basis or model in this academic area. The overall concept of consumer behavior is not limited to its use in the dimension of management and marketing research, as its core lies within a broad topic of human behavior, studied by academics in physiology and sociology fields. Several important theories illustrate how the intent to purchase products in virtual worlds is influenced (Guo and Barnes 2007).

The Theory of Reasoned Action or TRA is a psychological model developed by M. Fishbein and A. Aizen in order to explain or predict specific human behaviors. This theory states that attitudes towards behavior and subjective norms explain the behavioral intentions of individuals. Attitude towards behavior is defined as positive or negative feelings associated with the target behavior. Subjective norm refers to the perception of what most important people to an individual think is appropriate or inappropriate behavior in a particular situation. Each element of attitude and behavior is measured separately and is used to predict the next element, for example, satisfaction with a service.

The Theory of Planned Behavior or TPB was proposed by A. Aizen (1991) as an extension of TRA as to take into account conditions when people do not have full control over their behavior. The TPB postulates that actual use is determined by behavioral intent and perceived behavioral

control. Behavioral intention is determined by three factors: attitude, subjective norms, and perceived behavioral control. A number of beliefs and assessments, in turn, generates each factor. In the context of online shopping, attitude refers to the general consumer's feeling of being comfortable or uncomfortable in relation to the use of online shopping. Subjective norms refer to consumer perceptions of online shopping use as perceived by a reference group such as friends or colleagues. Perceived behavioral control describes consumer's perception of knowledge, resources, and capabilities required to use online stores. To understand the relationship between belief structures and antecedents of intention, a number of studies have considered approaches to decomposition of attitudinal beliefs. In the decomposed TPB model, attitudinal, normative and control beliefs are broken down into multidimensional belief constructions. The decomposed TPB model indicates that based on the diffusion theory of innovation, attitudinal belief has three determinants of intention: attitude, subjective norms, and perceived behavioral control.
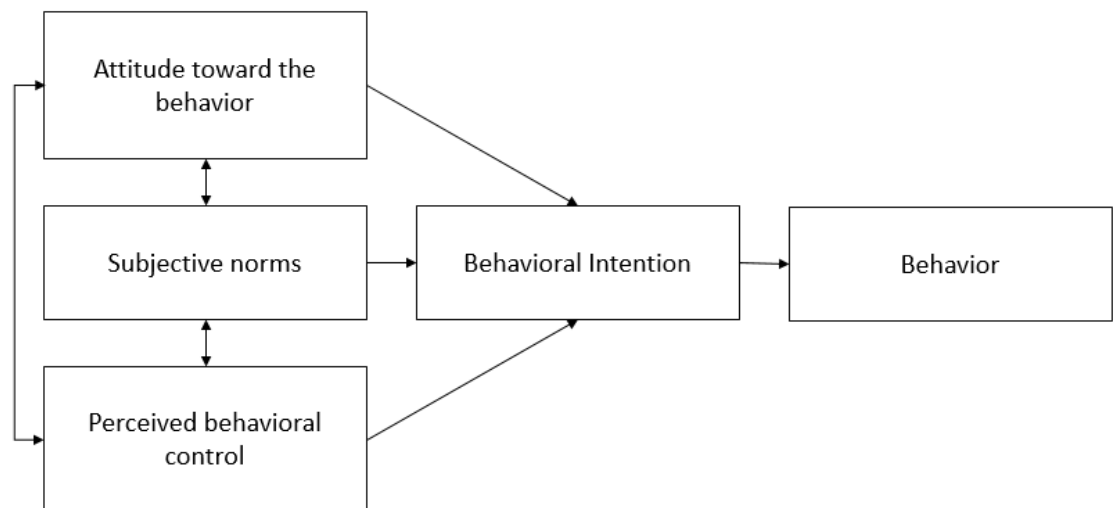
Diagram 1. Theory of Planned Behavior A. Aizen (1991)

A. Aizen extended the TPB model dividing the perceived behavioral control decomposition component into two dimensions: self-efficacy and facilitating conditions. The first dimension, self-efficacy, is defined as an individual judgment about the unique possibilities of usage. In the context of digital platforms, self-efficacy refers to the consumer's self-assessment of their ability to make online purchases, while facilitating conditions reflect the availability of the resources required to perform a particular behavior. With the increasing availability of Internet assistive equipment as conditions that facilitate technology and resource factors like time and money as conditions that facilitate resources purchasing goods online will also become more accessible.

Technology Acceptance Model aims to explain and predict individual acceptance of technology (Davis et al., 1989). This model can be seen as an adaptation of TRA that identifies two determinants influencing the intention to use new technology: perceived usefulness and perceived ease of use. Perceived usefulness is defined as the degree to which a person believes that innovation will increase productivity. According to this approach, consumers prefer to evaluate the efficiency of their purchases on the Internet in terms of the benefits and associated costs, including maximizing convenience and minimizing transaction time. Perceived ease of use is the degree to which an innovation feels simple to understand, learn, and operate. Technology Acceptance Model has been expanded by Venkatesh and Morris (2000) to include subjective norms in order to explain perceived usefulness and use intention in terms of social influence and cognitive processes. This relationship between behavior and beliefs has proven to be relevant in the online shopping environment (Chen et al. 2002).
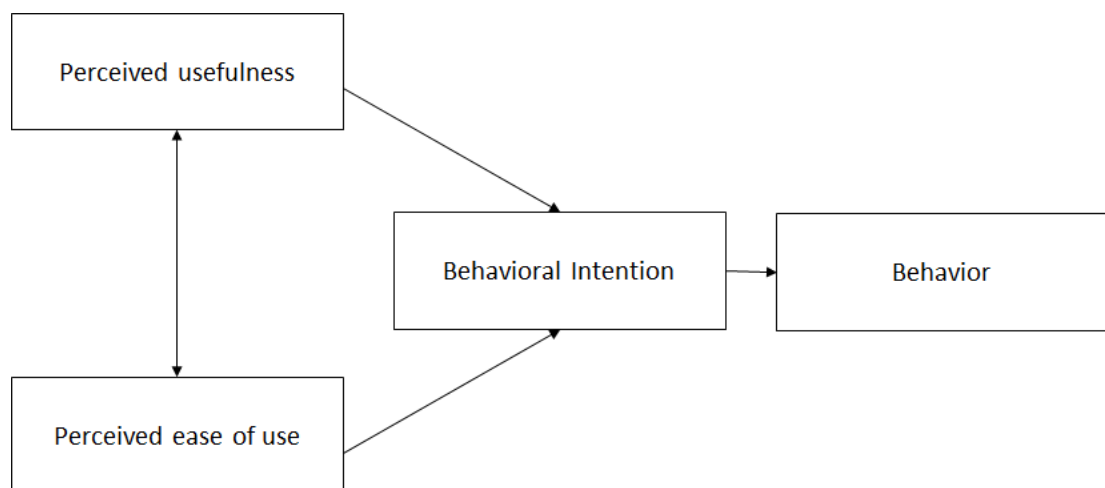
Diagram 2. Technology Acceptance Model

The Expectation-Confirmation Model focuses on post-purchase behavior (Oliver 1980). Satisfaction is central to this model, and it is shaped by the gap between beliefs and perceived performance, as well as indirectly dependent on both expectations and perceived performance through a mediated relationship that runs through the construct of nonconformity. The expectation-confirmation theory suggests that if the perceived product or service exceeds the person's original expectations and the confirmation is positive, it in turn increases post-purchase satisfaction. When a product or service does not meet the initial expectations and confirmation is negative, there is a possible decrease in satisfaction.

The Electronic Consumer Decision Process Model examines the consumer decision-making process for an online purchase through specifics of the e-commerce environment. The model was proposed in 2005 by M. Ambaye based on the traditional model of consumer behavior to describe the behavior patterns of consumers buying on digital platforms. It examines five stages of decision-making: need awareness, information search, and assessment of alternatives, purchase and consumption. According to this approach, under certain conditions, consumers can combine the two stages. The model describes three ways of buying: prior knowledge of the purchase; limited product knowledge; and impulsive purchasing, while assuming that the stage of need recognition is a complex process. These methods reflect various factors that a consumer may face in the purchasing process depending on unforeseen circumstances, some of which may require prior knowledge of brands or product types.

A review and analysis of the literature showed that existing research is rather fragmented, and in the process of studying consumer behavior less attention is paid to psychological factors, while the characteristics of the IP are considered more. In studies that include psychological factors, considerable attention was paid only to exploring trust and building satisfaction in context consumer behavior in online context. That is why a careful conclusion can be drawn that a closer study of psychological factors impacting consumer behavior can provide new insights in this field.

1.2 Factors influencing consumer behavior in gaming market

The development of motivation theories in game design

Schramm (1961) states that in order to understand media's impact and effect on people, we have first to understand the people's motivations to use that media. Video games have significantly diversified forms and methods of human interaction with the virtual environment and AI, and, on the other hand, have expanded the boundaries of emotional understanding of various aspects of reality within the digital environment. Video games affect personal psycho-emotional level not through a material medium, but through the game process itself, focused on solving specific problems. This is how video games differ from a material toy that gives a person a feeling of joy and satisfaction through direct contact. The essence of the game is based on motivations and incentives that involve a person in the game process and cause intense emotions in the user.

Motivation is defined as the series of processes that initiate, guide, and maintain goal-oriented behaviors (McReynolds, 1990; Weiner, 1992). Since the creation of video games as a medium, marketing and game development professionals in the industry have been trying to understand the motivation behind purchasing and engaging in a game. For an extensive period of time, it was believed that the main motivation behind playing video games was the promise of

extrinsic rewards, for instance, beating the game, getting the highest score or a possibility of finding a rare item. Within the concept of extrinsic rewards, consumers are engaging with video games solely for a promised reward. *Extrinsic motivation* is defined as behavior that is based on the achievement of a goal that is distinct from the activity itself. In other words, extrinsic motivation is instrumental in nature and performed in order to attain some other outcome. Extrinsic motivation is derived from an externally imposed purpose to perform an action, whereas *intrinsic motivation refers* to doing something because it interests or delights an individual (Legault, 2017). As it is described in the many works on physiology of consumption and behavior, academics believe that extrinsic motivations do not carry the same longevity and influence as intrinsic factors in the context of video games.(Yee, 2016)

The first model describing players' motivations in gaming that got traction in the academic community was taxonomy of player types developed by Richard Bartle in 1996. This classification describes different types of video game consumers based on their preferred actions: achievers, explorers, socializers, and killers. The following chart depicts these players as per a model where the one axis represents a spectrum of preference for in-game socialization versus exploring the world, while the other describes the desire for interaction versus action.
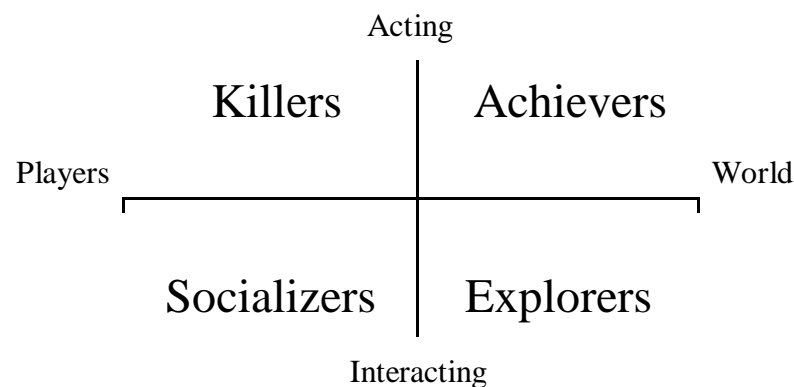

Diagram 3. Taxonomy of player types chart (Bartle, 1996)

- Killers or Clubs main game-playing preference is competition and battles with other players.
- Achievers or Diamonds value achievements in forms of in-game currency, points, levels or other measurable accomplishments. These players pursue video games with a goal of completing all available challenges.

- Socializers or Hearts are interested in the social aspects of gaming, like interactions with other players or building relationships with in-game characters.
- Explorers or Spades main motivation to play video games lies in discovering worlds and environments, as well as studying the lore of the game.

For a period of time this model was considered one of the main reference points for creating video games as a specific and audience targeted product. Later, Bartle further developed this model into eight base player types. However, while scalable and easily applicable, Bartle's model was met with a set limitations and criticisms in subsequent studies. For instance, in regards to this model Nick Yee discussed the difficulties of practical implication, as some player types seemed to overlap or have contradictory traits and values inside one category. With time the gaming industry moved away from this model.

Another widespread model is the Reiss Motivation Profile, developed by behavioral psychologist, Steven Reiss. This model breaks down an individual's needs into sixteen key variables (Appendix №1). It has been spread across all kinds of industries and has a proven record of being an accurate representation of one's underlying motivations. However, there were issues that created complications in practical exploitation of this model in gaming domain, as some of the described factors are difficult to translate in terms of video game motivations and systems, for instance, human need for physical activity or family.

A more accessible and applicable to gaming industry Self-Determination Theory appeared in the 1980 as a result of the various studies on extrinsic and intrinsic motivations and their impact on self-motivation and self-determination. S.Rigby and R. Ryan (1980) applied this 3-domain model to the gaming industry, resulting in the creation of the Player Experience of Need Satisfaction approach to game design.
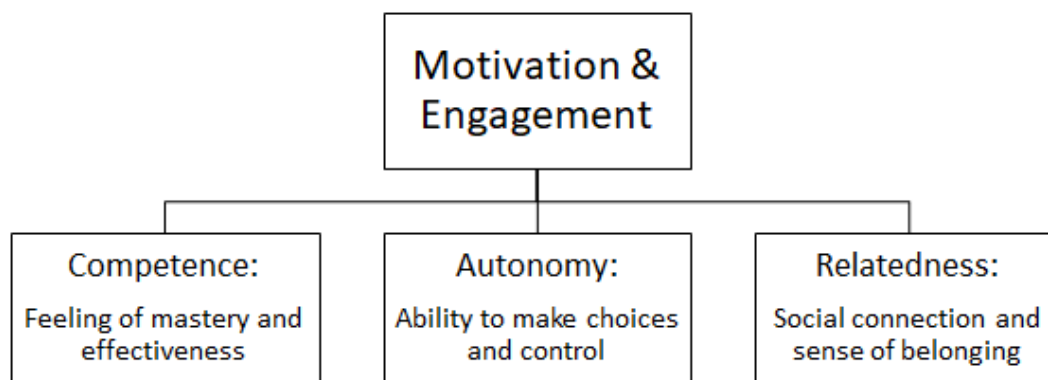

Diagram 4. Self-Determination Theory (Rigby & Ryan, 1980)

- Competence describes the individual need for mastery and growth within gaming activity. In designing an optimal gaming experience it could be achieved in the form of optimal challenges and mastery expressions.

- Autonomy as a factor in gaming motivation is a reflection of a player's need for self-expression that is composed from individual values and choices. However, it is important to note that these choices have to be self-initiated and not imposed.

- Relatedness is the need to connect, interact and care for others. In video game terms this desire could be described as making an impact on digital worlds, bonding with other players or in-game characters, and sharing personal experiences.

While investigating the behavior of players within the framework of video game participation and motivation, J. Juul (2010) defined several distinct types of goals:

- Completable goal – a once achieved goal that is expressed in the successful completion of the full linear gameplay, which does not encourage replays by players achieving emotional and cognitive saturation.

- Transient goal – after having successfully completed one stage or level, the player sets the task of winning the next match. At the same time, it is not possible to change the result of an already played match.

- Improvement goal - a goal of constantly improving the results obtained is carried out by the player in the framework of highly competitive types of games, when, having achieved a certain result, the player immediately sets himself the task of surpassing this result.

It is important to take into consideration that participating in games can evoke both positive and negative emotions. For instance, defeat inevitably accompanies almost all games and can potentially cause an extremely negative reaction. However, according to A. Jervinen (2005), players generally realize how much a game can affect their psycho-emotional state and choose video games that match their mood. In their theory of mood management, researchers D. Zilman and J. Bryant (2003) debate that people choose digital entertainment in a way that enables control over one's mood. Thus, although games evoke a wide range of emotions, players can consciously or subconsciously foresee this and are able to choose products that effectively balance their psycho-emotional state. The type of influence on the psycho-emotional state of the user is largely determined by video game visuals, which are formed by the artistic and technological means used by developers. Several game design factors could immerse people in games and are a powerful incentive to purchase and engage with video games. Game design theorist M. LeBlanc (2004) has

identified several components of video game design that can give players a sense of joy and pleasure:

- Maximum use of all senses - The visual component of modern games has reached such a high level of performance that, together with the correctly selected audio, can create a complex and realistic range of sensations.
- Imagination - Forcing the player to creatively rethink the audio and visual information obtained as part of the gameplay, and create an own unique game reality
- Plot - Storyline intricacies that are able to keep players engaged throughout the game process
- Gameplay complexity - A certain level of challenge given to the player, achieved through the presence of interesting and varied tasks
- Socialization- the ability to carry out actions with other players to achieve a common goal
- Discovery - the ability to explore the digital gaming environment through gameplay and discover new and unexpected aspects of it
- Self-expression – an incentive for participation in the game process due to the absence of many conventions, which gives the player a certain perceived level of freedom;
- Immersion - the ability to become fully engaged with digital reality.

Immersion is strongly linked with the need to obey the rules of the game, as without it players would not be able to enter a so-called "magic circle" – a special reality created by the game, which has its own special atmosphere, laws and attributes. (K. Salen and E. Zimmerman, 2004) This term was first mentioned in the "Homo Ludens" book by J. Huizing (1938) to describe the space in which the gameplay unfolds, and players voluntarily accept its realities for the duration of the gameplay. K. Salen and E. Zimmerman consider the moment when a player enters the "magic circle" to be the beginning of the game with its implicit in-game behavior and tasks. The "magic circle" exists as long as the game continues, and disappears until the player expresses his willingness to follow the rules of the game again. These two actions, entering the "magic circle" and keeping it alive, represent two fundamental tasks of game developers, who have to create gaming products in such a way that attracts players to gaming.

Numerous studies conducted by Blizzard (2014) game development company have shown that the majority of users tend to value the ability to make choices during gameplay when deciding what games to play. Many games exploit those powerful levers of psychological influence on the emotional background of the individual as a sense of pride in achieved results, which can be achieved through in-game praise, the accrual of bonuses and a visually effective victory over the

enemy. At the same time, the practicing game designer and theorist R. Koster (2013) emphasizes that the reason why computer games give consumers pleasure lies in the constant need to recognize visual information and assimilate certain patterns and interiorize various concepts present in any type of gameplay. Professor E. Zherdev (2015) emphasizes that the perceptual model of a person is based on the search for signs of similarity with the external environment, especially with living beings.

Taking into account many factors influencing the differences in game behavior and perception of the game process, R. Koster singles out the universal aspects of a successful game: the preparatory stage (reconnaissance and / or anticipation); interesting play space; thoughtful game mechanics; a variety of tasks that require the acquisition and use of a variety of skills; the need to make meaningful decisions; element of unpredictability; negative consequences as a result of loss further increase the effectiveness of the recipient's activity in the game.

One of the factors directly influencing the feeling of pleasure that customers look for in gaming is described as the state of flow, which was defined by psychologist M. Csikszentmihalyi (1989) as a point between what is perceived as difficult and boredom. From the game design point of view, all aspects of the game should correspond to the overarching goal - to contribute to a more complete immersion of players in the game world. The digital game world refers not only to landscapes and types of vegetation, but also to a much more comprehensive phenomena, such as reflecting the expectations and preferences of the target audience; physics operating in the game that determine the cause-and-effect relationship of events; the value system internalized by the protagonist, and the mutual influence of the game world on the gameplay.

Professor J. Murray (2004) ranked immersion as one of the most important features of the digital environment. The concept of immersion was deepened and expanded due to the research carried out by L. Ernie and F. Meire (2005), who identified three types of immersion: 1) caused by senses, which in the context of game design on the current stage of its development is achieved due to the audiovisual flow and tactile sensations; 2) initiated by the need to find a solution to a problem, which is reflected in the presence of a large number of puzzles, as well as tasks of a strategic or tactical plan; 3) based on the work of artistic imagination, which is fully manifested in digital games with abstract or minimalist graphics, forcing the player to independently speculate on the images perceived on the screen.

M. Csikszentmihalyi (1980) emphasizes the importance of exercising control paradox over a situation with an uncertain outcome, meaning that, on the one hand, an individual enters a state of flow only when he or she feels in complete control of the situation, and, on the other hand,

constantly feels that it is possible to lose control at any moment. B. Mitchell notes the important role of the immersion effect achieved by overlaying stimuli that affect the psycho-emotional state of a person, such as changing weather or time of day in the game universe, overhearing conversations of non-playable characters, realistic movement and behavior of heroes, swaying grass and trees etc. The flow state is thought to be caused by an increase in dopamine, which is a neurotransmitter that increases the ability to concentrate and is characterized by extreme focus on the subject of the activity (in this case, the gameplay), full involvement and high motivation to achieve success as a result of this activity. The release of dopamine is observed when any action leads to a positively perceived individual result, reward, and the amount of dopamine reaches its peak when this reward is unexpected (M. Csikszentmihalyi,1980).

In order to allow the player to spend a long time in a state of flow, the gameplay, which K. Salen and E. Zimmerman (2004) define as a formalized interaction, realized in the process of players following the rules of the game and gaining a certain experience in the resulting game process, must have a sufficient amount clear and achievable goals, located at certain time intervals from each other, and constantly pose new, interesting tasks for consumers, which should not be so easy as to get boring, and not so difficult as to cause frustration.

The most recent motivation model of players was built by the US researcher Nick Yee (2016). The model has three main factors that could be broken down to become a six-factor, taking into account the peculiarities of players' motivation in games of different directions and genres, with different gaming experiences and varying degrees of passion for games: action, social and mastery. This model currently is the most widely used approach to analyzing motivation of players.

Based on the analysis of existing approaches to understanding motivation, several main factors were highlighted (Table 1). Most of the analyzed works and development of gamers' motivations do not go in depth on the relationship between gamers' motivations and game engagement, which is considered to be one of the most important indicators in the gaming market. Additionally, Hoffman and Novak (2009) argue that gamers' motivations are expanded by the flow model.

Motivation	Description	Adapted from
Action	Destruction and excitement serve as main motivations to playing games	Hamari et al. (2016), Yee (2016), Caroux et al. (2015), Hung et al. (2015), Than et al. (2014), Hilgard et al. (2013) Jansz, Tanis (2007), Sherry et al. (2006), Lazarro (2004) , LeBlanc (2004), Caillois (1961), Griffiths (1993)
Social	People with this primary motivation seek social connection in the form of either communications or competition.	McGloin et al. (2016), Yee (2016), Dalisay et al. (2015),Thanh et al. (2014), Shelton (2010), Jansz, Tanis (2007) Sherry et al. (2006), Steinkuehler (2005), Bartle (1996), Malone et al. (1987), Caillois (1961)
Mastery	Gamers who are driven by the ability to practice and master a skill or build long-term strategies.	Yee (2016), Hilgard et al. (2013), Lee at al. (2012), Jansz, Tanis (2007), Rigby et al. (2006), Sherry et al. (2006), Steinkuehler (2005), LeBlanc (2004), Lazarro (2004), Griffiths (1991), Myers (1990), Malone et al. (1987)
Achievement	Players driven by quantifiable, consistent rewards that clearly show progress	Yee (2016), Hilgard et al. (2013), Lee at al. (2012), Jansz, Tanis (2007), Rigby et al. (2006), Sherry et al. (2006), Steinkuehler (2005), Bartle (1996), Caillois (1961)
Immersion	Players with this primary motivation want to be part of the game world and story.	Yee (2016), Hilgard et al. (2013), Lee at al. (2012), Jansz, Tanis (2007), Sherry et al. (2006), LeBlanc (2004), Myers (1990), Malone et al. (1987), Caillois (1961)
Visual/creativity	These players are driven by visual expression, individuality and exploration possibilities	Yee (2016), Hilgard et al. (2013), Lee at al. (2012), Jansz, Tanis (2007), Sherry et al. (2006), LeBlanc (2004), Myers (1990), Malone et al. (1987)
Novelty	Curiosity and a search for something new and fresh, either emotion or technology.	Yee (2016), Hilgard et al. (2013), Lee at al. (2012), Jansz,), Sherry et al. (2006), LeBlanc (2004)
Diversion	This gaming motivation relates to the desire to shut down from the real world and seek comfort in another activity.	McGloin et al. (2016), Yee (2016), Dalisay et al. (2015),Thanh et al. (2014), Shelton (2010)

Flow theory and engagement

While there are many theories and classifications describing possible customer motivations to play video games, it is theorized that what ultimately attracts players is a possibility of achieving a flow state with all its accompanying factors. Gaming products, presenting factors that accompany flow state are viewed as high value products within a gaming market framework.

Flow theory explains the pleasure found in immersion in activities (Sherry, 2004). Csikszentmihalyi (1989) suggested that when a person reaches the flow state, the player will experience engagement, be active, feel happiness and satisfaction. Additionally, flow state is thought to be connected with intrinsic motivation, as it coexists with feelings of absorption and interest. Przybylski et al. (2010) states that gaming is an intrinsically motivating process. A high level of engagement while gaming is thought to provide the highest value from the perspective of experience.As a result, it can be theorized that one of the major reasons individuals play video games is to achieve a state of flow. (Murphy, 2011)

Hedonic consumption in video games has been studied by a number of academics. Hedonic consumption is defined as total absorption in an activity.(Shin, 2006). Only a few researchers, however, have applied flow theory specifically to the study of video games. The flow condition of a player predicts how much time they spend playing, according to Seger and Potts (2012). The authors identified individual differences in gamers' flow experiences, finding that male players achieve flow state more frequently than female gamers. Moore (1996) says that gamers are actively looking for a sense of flow. Flow can impact behavioral intentions, for instance, online purchase intent, revisit intent, and the desire to play an online game (Koufaris, 2002; Luna, 2003). As a result, being in a flow state is thought to increase the likelihood of making a purchase.

Engagement

The term "engagement" has been studied in a variety of fields, from sociology and psychology to marketing disciplines such as consumer behavior. Bordie (2011) defines consumer engagement as a physiological state that is created as a result of customer interactive experience with an object. Many academics stress the relevance of engagement in the context of digital experiences (Brockmyer et al., 2009)

The ultimate focus of game production from the moment concept designs to marketing is to engage players into the final product- videogame. Appendix 2 illustrates the full process of making a video game. However, for game development, it often happens that the distinction between psychological elements and motivation is not properly distinguished. For instance,

according to Yee (2006), there are underlying differences in gaming motivations that could be based on gender, age and socialization patterns, emphasizing the importance of studying these differences in order to create advanced entertainment experiences. Thus, studying gaming engagement can be seen as a promising idea that can serve as a tool to predict and find reasons behind consumer relationships with goods.(Hollebeek, 2014).

The study conducted by Brockmyer et al. (2009) further developed the concept of gaming engagement by introducing it as a quantifiable construct of game involvement. According to this research, the level of gaming engagement could be measured through involvement, immersion, state of flow and task absorption.

Research Hypotheses

Based on the evidence from the literature on topics of consumer behavior online, motivation and engagement the following theoretical model explaining the relationship may be proposed (Figure 1):
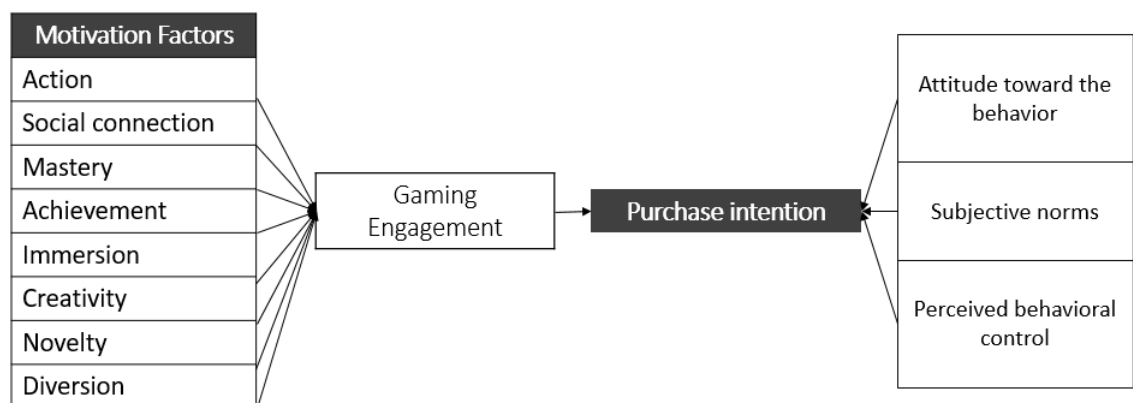
Figure 1. The hypothesized model.

The framework consists of three main blocks. The first block describes the factors that motivate players to start gaming. That includes items like action, social connection, mastery, achievement, immersion, creativity, novelty and diversion. Here, the first research question can be formulated:

RQ1. How gaming motivation factors influence engagement of Russian video game consumers?

Second block represents gaming engagement in relation to purchase intention, station the second question of the research:

RQ2. What is the role of engagement in the relationship between gaming motivations and purchase intentions in Russian gaming industry?

The third block relates to influence that attitude towards purchasing games, subjective norms, surrounding the industry and perceived resources and knowledge can have on purchase behavior:

RQ3. How attitude towards purchasing games, subjective norms and perceived behavioral control influence purchase intent of Russian video game consumers?

Chapter 2. RESEARCH METHODOLOGY

This chapter is dedicated to determination, justification and detailed description of applied research methodology. The first part of the chapter provides a detailed description of the current gaming market, whereas the second part concentrates on discussion of the research context, data collection process and the questionnaire design used in the study.

2.1 Gaming Industry Overview

Video games fall under the broad category of hedonic goods, as researchers connect game consumption processes with feelings of fun, engagement, pleasure and other multisensory responses (Abbasi et al., 2015). Video games as entertainment products are an intricate combination of technology, art and management.

Gaming industry structure

Modern video game industry structure can be described as a value chain of several interdependent and connected actors: gaming platforms, gaming engines, game development, publishing and operating, marketing and consumption. In recent years, gaming communities and cybersports have also started to become important parts of gaming industry structure.

Gaming platforms are hardware or software systems that allow running interactive gaming programs. Hardware based gaming platforms include personal computers, gaming consoles like PlayStation or Nintendo, and mobile devices. Non-hardware platforms include network infrastructures, virtual machines like Java or Flash, browsers, social media, and, more recently, innovative platforms of virtual reality. Today many gaming products are created as cross-platform projects, however, games exclusive to one platform are a popular release choice as well.

Gaming engines connect gaming platforms with the programming code of the game itself. Gaming engine, often referred to as game architecture or game framework, is a software environment used to build and develop gaming programs for various platforms, for instance, PC or consoles. The functionality of different gaming engines, such as graphics, audio, animation and physics capabilities directly influences the state of the end product. Using an existing game engine can significantly simplify the development of new games, reduce the cost of production, shorten the time to launch and enable the creation of cross-platform gaming products. Among the most advanced modern frameworks, developers more commonly use Unity Engine and Unreal Engine.

Game developers are companies and independent teams engaged in the creation of gaming products. Game developers are responsible for the process of creating the game itself, which entails using company's creative and technological capabilities in order to build the game

throughout main stages of game development, from the the initial core idea and scenario designs in pre production, to level architecture, character design, and gameplay innovation during production, to sound design and cinematics creation and polishing in post-production step. Within the video game industry, it is developers who could be considered as the most dependent actors in the vertical value chain. Game development companies are dependent on manufacturers that supply hardware, gaming engines and other necessary technology, while at the same time they rely on publishers for funding access, marketing resources, and promotion campaigns (Brion, 2016)

Publishers are responsible for bringing the game into the market, are behind the decisions of which projects will be put into production, allocate funding, do marketing promotion, and carry out market research. Publishers pay for any licenses, oversee localizations for international markets, interact with platform owners, conduct marketing campaigns, deploy infrastructure, and provide technical and informational support for released games. For smaller gaming products, this level of operation is usually out of reach, which is why independent developers conduct market launches by themselves, interacting directly with platforms.

Monetization

The choice of a monetization model for video games typically depends on the platform, be it a console, smartphone or personal computer, as well as the target region. In some countries, console gaming is not as widespread due to the high level of Internet piracy, caused by the population's inability to pay for digital products. In today's market, modern video game companies use a hybrid approach to monetization - a combination of methods that forms a flexible model, where the disadvantages of one monetization method can provide advantages for another. (Sedykh, 2020) The most popular approaches to monetization are:

1. A pay to play model - selling physical and digital copies of a game is a classic and most widespread monetization model. For a fee, users get access to game content and gameplay, most commonly distributed through digital platforms. As per majority of publisher policies, prices in physical and digital stores can be practically the same, which is achieved through cost cutting in packaging, printing discs, and shipping to retail outlets.

2. Micro transaction model - a free to play model that assumes a low entry or zero access cost with the subsequent sale of personalized products like in-game skins, currency, collectible items or additional content. This approach allows players to familiarize themselves with the game and evaluate the quality of a product. Publishers start making money on micro transactions as players become further involved with the game. According to SuperData

Research, the current global free to play market is estimated at over 22 billion dollars, and is expected to grow up to 25 billion dollars by 2022.

3. Episodes - While seemingly a less costly method compared to a one-time product release, this approach has its difficulties. For instance, it is necessary to constantly maintain player interest between episodes, which is proven to assume costly marketing expenses. Nevertheless, a number of indie studios are still using or are willing to implement an episode model.

4. In-game advertising and partnerships - Gaming companies can generate income from trading user personal data and displaying advertisements. This approach is more commonly used for mobile platforms, however, more and more brands are willing to collaborate on in-game promotion.

5. Modding and custom content - User-generated content is an important component of gaming infrastructure. The process of creating content itself is perceived by users as a game, and the built-in tools for modifying games (modding) allow to effectively retain the target audience. In addition, modding, according to the developers themselves, is a kind of forge of ideas and personnel for the gaming industry.

Competitors:

Global computer game market is highly competitive, consisting of thousands of small to medium companies, however, the majority of market is occupied by corporations:
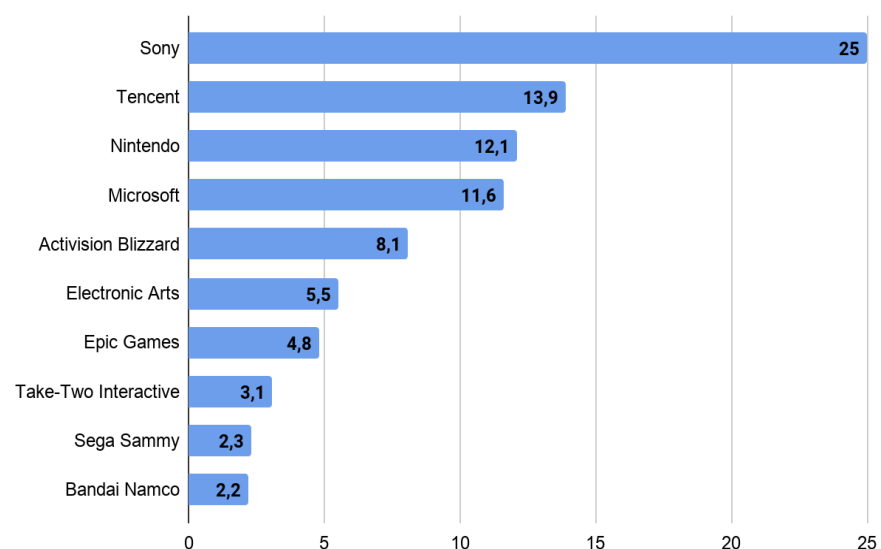
Top video games companies by 2020 revenues (in U.S. dollars)

Source: Statista

Consumers

Industry analytics report that today there are more than 2.5 billion gamers worldwide and, according to forecasts, this number will only continue to grow. Among the factors contributing to the development of video game consumption, academics emphasize the continuity of generations. People who grew up playing video games are now becoming parents and usually pass on their gaming preferences to children.

From a gender point of view, according to research agencies, the distribution of players is approximately the same - 54% of gamers worldwide are male and 46% are female, respectively. The average age of a gamer is around 34 years. In Russia, 70% of players are over the age of 27.

Video game market in Russia

Russian gaming industry has developed from its semi-legal existence to an independent actively growing industry in recent years. Today, despite a number of problems, such as the existence of privacy, lack of specialized policies and lack of qualified personnel, Russia is considered to be one of the most promising emerging markets. From a game development point of view, Russian and foreign investors are becoming interested in this industry as products of Russian developers gain more popularity. There are also significant developments on the side of esorpts, as the cyber sports ecosystem is steadily forming. (Sedykh, 2020)

Today Russian gaming market is steadily strengthening its position on the global entertainment market. According to Newzoo estimates, there are currently more than 65 million people who regularly play video games of any genre and on any platform gamers in Russian Federation. Approximately half of them belong to the "paying" gamer category - purchasing games or paying for in-game content, which is considered to be an indicator for an emerging market by industry analytics.

According to Yandex research, Russian gaming market has grown by 15% up to 2 billion dollars since 2019. However, despite these positive dynamics, Russian share in the global computer games market does not yet exceed 1%. The number of purchases made on average in Russian Federation grew by 14% since 2018, while average revenue from a player increased by 11% from 2.2 to 2.5 thousand rubles. At the same time, according to experts, the estimated amount of one-time purchase decreased by 2.7% to 451 rubles.
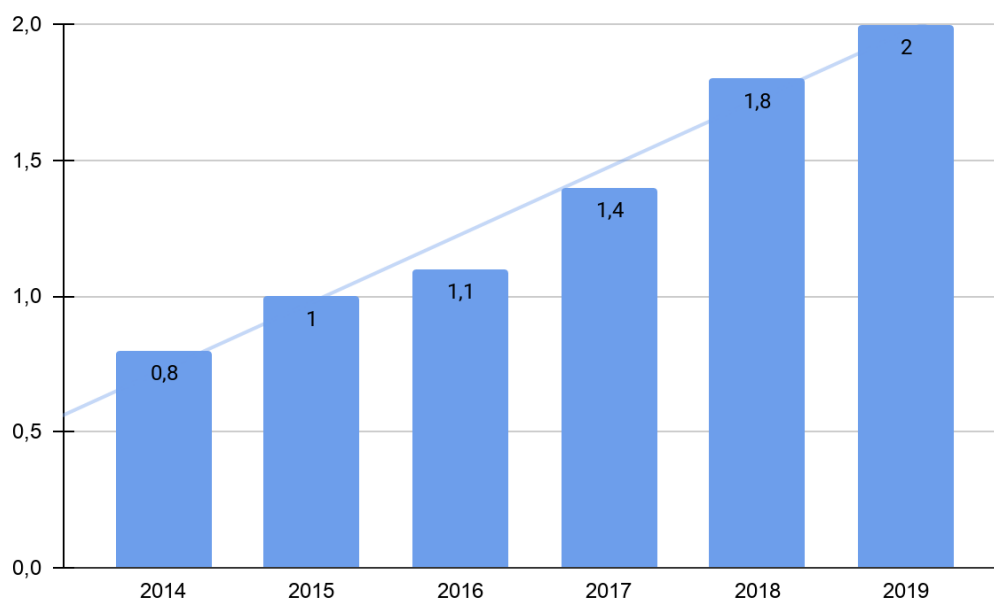
Video games market revenue in Russia from 2014 to 2019 (in billion dollars)

Source: Statista

The demand for computer games has remained consistently high over the past five years, however, at the same time competition is intensifying in the industry. New products are constantly being released, developed by both Russian and foreign gaming companies. According to experts, up to one thousand projects are released daily on the mobile games market and hundreds on the PC and consoles markets, both indie and high-budget products. This production scale leads to an oversaturation in the sector, partly transforming it from creative to mass market, which in part creates higher demand for quality original gaming solutions.(Sedykh, 2020)

PC remains to be the most popular platform of choice among Russian gamers, however, the growing interest in console gaming combined with booming mobile gaming industry are threatening to decrease personal computer gaming. All the game purchasing is moving online - only 15% of gamers bought games offline in 2020.(MyGames, 2021)

Current market state, trends, and future outlook

Researchers predicted that 2020 was set to become the most profitable year yet for the gaming industry. Global video games market was projected to generate over 170 billion dollars in revenue, showing approximately 17% growth rate in comparison with previous years. Additionally, according to PwC forecasts, a 6% growth was also expected in Russian gaming market - the largest emerging video game market in Eastern Europe. However, the global pandemic shifted any previous projections and adjusted researcher's foresight of the market

development. It is still difficult to give an unambiguous assessment to the impact that this pandemic had on the market, as both positive and negative influences could be derived from this situation.
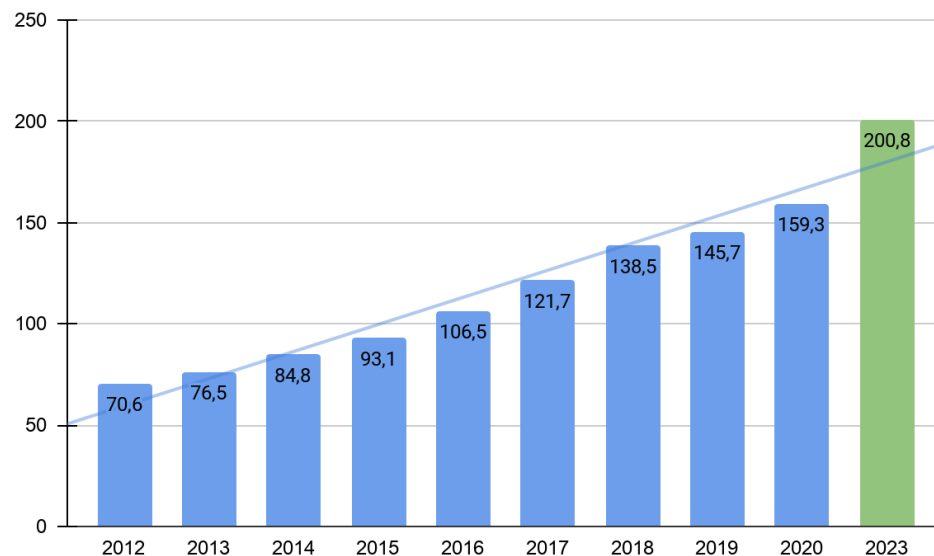
Global video game market value from 2012 to 2023 (in billion U.S. dollars)

Source: Statista

Global lockdowns have led to consumers leaning towards affordable digital entertainment. According to Nielsen estimates, the average time spent playing games has increased by 30-40% (Nielsen, 2020) In China, a strict quarantine triggered an active growth of 25% in the national gaming market compared to the last quarter of the previous year. A similar situation can be noticed in several other international markets, with mobile products being one of the main growth drivers in the gaming segment (China Game Developers Association, 2020). Steamworks Development in its yearly Steam results article reports that the number of active pc gaming users per month exceeded 120 million in 2020, while this same figure for the day exceeded 62.6 million.The service has also reported record numbers for concurrent users - 24.8 million, an average of new users that registered on Steam every month - 2,6 million, time spent in the game - 31.3 billion hours, and purchased games - an increase of 21.4% compared to 2019.According to analysts and industry participants, it is yet unclear how long this trend will persist, as this pandemic could still potentially severely hit national economies, resulting in costs cutting of non-essential purchases (Steampowered, 2020)

Despite the negative impact of covid on the sports industry with competitions during the pandemic having been canceled or postponed, esports and cyber tournaments showed increase in

user interest and viewership. World's largest streaming platforms -Twitch and YouTube Gaming- also saw a 10 - 15% audience growth. Such increase in viewership could, in turn, potentially lead to higher profits from advertising and sponsorship, unless it coincides with the reduction of advertising budgets in connection with the difficult economic setting.

Russian market has followed described trends as well: according to expert data, gamers also had more free time and 25% of respondents played video games on self-isolation .According to Yandex.Money 2020 data, in April the turnover of payments for video games and in-game content increased by more than 20% compared to the beginning of the year, which analysts attribute to the quarantine measures. Among the Russian cities with more than a million people, the largest average amount spent on PC and console games is found in Moscow, while Saint Petersburg had the smallest average purchases. For the first half of the previous year, about 70% of the gamers' payments turnover fell on the purchase of video games and about 30% on the purchase of in-game content. This difference is further highlighted if to compare the number of payments: 85% for games and 15% for in-game content.. At the same time, the average amount paid for in-game content is 2.4 times more than for games themselves (YooMoney, 2020)

Marketing opportunities and trends in gaming industry

Marketers in the gaming industry are focused on maximization of video games and studio brands visibility in an extremely competitive market. The most common tools in achieving this task are influencer marketing, sponsorships and advertising, from traditional billboards to in-game advertising.

Marketing in the gaming industry has significantly changed over the last couple of years under the influence of ever changing gaming trends and a rapidly evolving market. Around five years ago, most game releases were announced several years prior, accompanied by interviews, press tours and demo versions, while the most significant part of the budget was allocated towards creating spotlights and trailers for exhibitions, as well as press publications in specialized journals, that mostly lost their relevance today. Many resources went into store decoration, such as posters, shelving and other merchandising instruments that were able to catch interest and stimulate impulse buying. Companies generally valued the number of game copies sold to the stores over one's sold to customers.

While some of the more traditional methods are still used by marketing professionals, today marketing in the gaming industry shifted towards performance marketing, that analyses everything that is happening around the game on all of the promotion stages, taking specific interest in

qualitative indicators of each step. Performance marketing in the gaming industry has proven to be more effective than previously used methods, however, it is also tuned out to be more costly. Every year the cost of attracting one new player grows, while customers are becoming oversaturated, resulting in the constant evolution of marketing strategies in the gaming industry.

A significant amount of new promotion channels has also affected marketing in the gaming industry. Outdoor advertising, television and printed press are less and less effective with each year, as the target audience long ago moved to social media, blogs and apps. The marketing activity cycle also seems to have changed and become shorter, for instance, today even the largest gaming publishers tend to announce projects half a year prior, as to not lose audience interest in an oversaturated market.One of the more popular approaches to game creation of copying and benchmarking successful projects, most popular with Chinese developers, are becoming not as popular. As the market grows, audiences become more experienced and aware of slightly changed design, settings and mechanics with lack of originality.

The main goal of a marketing professional in today's gaming market is to not only track trends and tendencies of the industry and make decisions on promotion tools, but to find new ways of accessing the target audience, gaining an extensive understanding of the customer base. Creating a game only to try and come up with who it could be catered towards, marketed and sold to after seems near impossible in today's state of gaming market. It is critical to choose the target audience of a particular game with diligence, proceeding to analyze its preferences and behavior. (Zykov, 2017)

Relationships marketing is becoming more and more popular with gaming companies, as cases of successful use can be seen from the biggest developers, for instance, Riot Games puts heavy emphasis on audience interaction, with events, digital content, live shows and tournaments every year in order to gain and retain audiences. As a result this company is able to accumulate a daily audience of 20 million people all over the world.

In today's competitive gaming environment success is ensured by new and fresh promotion channel usage, cooperation with information sources that are believed by audiences to be objective and unbiased, and therefore trustworthy, primarily streamers and influencers. Today's gaming marketing is quality oriented and is aimed not only at promotion, but at building relationships between the game and the player. Gaming marketers are focused on striving to understand video games audiences in order to use best-suited communication channels and assess their effectiveness. That is why it is so important to learn as much as possible on consumer behavior, preferences and local uniqueness.

Experts and industry participants are singling out the development of several *key trends* that will determine the future of the global gaming industry:

Mobile gaming. Currently, mobile games are the fastest growing segment in the gaming market due to the availability of mobile devices and mobile traffic. According to Limelight, smartphones today are the most popular gaming device worldwide (Limelight, 2020). Additionally, adaptation of traditional PC and console games for mobile also serves as a factor in the growth of the mobile segment. Gaming analysts debate that bringing popular online games such as PUBG and Fortnite to mobiles, along with improved performance, has provided players with experience that can rival traditional PC or console games. Many publishers and experts see the mobile market as containing great potential, which makes it especially attractive to investors.

Socialization in gaming. Today multiplayer game projects are functioning as social spaces where participants can play and communicate with other people. Experts believe that similar subsequent projects will apply the idea of multiplayer games as a social experience rather than just a gaming experience. In addition, there are many examples of integration of popular social networks with gaming products. Publishers embed options like the ability to share screenshots or record and post videos on social accounts into game interfaces.

Esports. Competitive gaming is one of the fastest growing areas in the industry. In a number of countries, including Russian Federation, esports is recognized as an official sport and is ranking high among other popular forms of entertainment. According to Newzoo estimates, the volume of the global esports market amounted to over 1 billion dollars in 2019, while longer-term projections for the esports market in 2022 could grow up to 3.2 billion dollars. Cybersport tournaments can already be compared to traditional athletic championships in terms of the prize money. The largest team competition prize pool amounts to 34 million dollars for International 2019 Dota 2 tournament, while Fortnite World Cup Finals 2019 has a largest solo prize amount - 15 million dollars (Statista, 2020). Usually the largest tournaments are held on real venues, gathering thousands of spectators, as they are simultaneously broadcast live on the Internet, attracting a multi-million dollar audience. Largest video services like Netflix are expected to enter the cyber sports broadcast market. Moreover, traditional media is also expected to soon expand into broadcasting esports championships, attracting viewers through acquiring exclusive rights to content.

Streaming. According to SuperData, the audience of game streams amounts to over 650 million people, which is more than the combined audience of such major entertainment channels as HBO, Netflix and Hulu. The main ways of content monetization are embedded advertising,

direct advertising on stream, affiliate programs, paid subscriptions and donations from users. Users are willing not only to play, but also watch others play because streaming is able to provide a complete understanding of a video game without actually purchasing it. In recent years a whole segment of specialized video streaming services showed rapid growth:
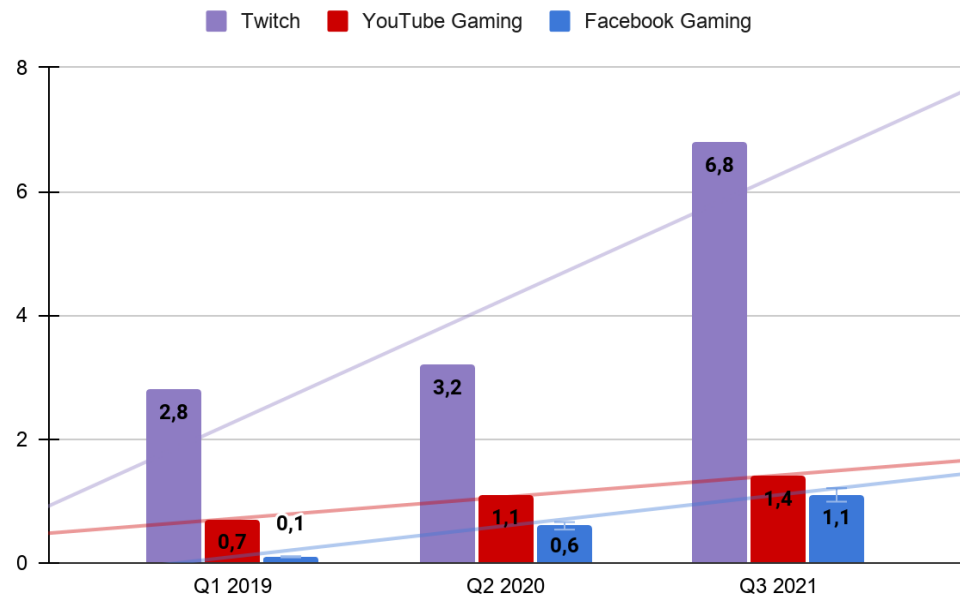
Billion hours watched across Twitch, YouTube Gaming, and Facebook Gaming

Source: Stream Hatchet (2021)

Game-streaming platforms reached 8,8 billion hours watched combined for the first quarter of 2021, showing an overall increase of 80% compared to the similar period last year. The greatest increase came from Twitch which showed a 97% growth since last year. This viewership spike can partially be attributed to the pandemic regulations, steering people towards live streaming and video games due to unavailability of traditional forms of entertainment. (Stream Hatchet, 2021). Publishers of all sizes are realizing the potential of streaming monetization and promotion opportunities. According to Sony, videos and video creation tools will soon be integrated into the games themselves. It is possible to assume that the market can soon see an influx of games that were specifically designed to attract users via streamers through non-standard cooperation models, unusual visuals and graphics, as well as great opportunities for creating interesting collaborative videos (some recent examples of such products are "It Takes Two" and "Among Us").

2.2 Study Setting and Data

The following paragraphs are dedicated to the detailed description of the research methodology. Firstly, the setting and context of the study is provided, followed by sample profiling and questionnaire design rationale. The exploratory method of research is used in accordance with

study's main goal to explore patterns and relationship between motivation to play games, engagement and intent to purchase video games. This empirical study is quantitative, cross-sectional, and conducted one-phase.

The empirical study is undertaken in the form of the survey due to the exploratory nature of the research. Additionally, this form of study allows for an optimal way to gather an extensive amount of data in a relatively simple manner combined with straightforward encoding, analyzing and interpreting the data. The survey was conducted in the form of a fully structured online questionnaire distributed over the Internet through social media platforms, messengers and personal inquiries for targeted selection. The choice of these communication channels provided accurate and easy access to the respondents of the target group of the study.

In order to reach the participants that fit the context of this research, the links to the survey were posted in a large gaming community in social network VKontakte. The survey was also distributed among thematic communities on other social media platforms, for example, Twitter. The target audience for this survey were people who play videogames on personal computers or consoles and make purchase full video game titles. The decision to study purchase intent of full games for personal computers and consoles was based on the different purchase processes, mechanics and behavior for mobile buying and in-game microtransactions, as well as the popularity of these platforms in Russian market. After eliminating several survey responses that indicated no interest, prior knowledge or experience in gaming, 195 questionnaire responses composed the sample size of this research.

A detailed description of the respondents profile is presented in Table №. The gender breakdown is almost evenly split between 51, 3% woman and 48,7% man. The core age for the study is in line with the general gaming statistics, which is majority adults from 18 to 30 years of age, 26 to 30 being the largest age group. The respondents overwhelmingly chose personal computers as a gaming platform of choice, followed by consoles. Almost 36, 9% respondents admitted to playing games for at least 30 minutes almost every day of the week. The majority of respondents self-identified as core or expert players in terms of their level of expertise, experience and amount of time spent on gaming. An overwhelming majority indicated role playing games as their favorite game genre, which was also reflected in the open question on all-time and recently released games, as many people wrote in the same titles, such as Witcher: The Wild Hunt and Dark Souls series.

Characteristic	Frequency	Percentage
Sex		
● Female	100	51,3
● Male	95	48,7
Age		
● <18	11	5,6
● 18-21	42	21,5
● 22-25	53	27,2
● 26-30	65	33,3
● 31-35	18	9,2
● 36+	6	3,1
Gaming Platform		
● PC	154	79,0
● Console	29	14,9
● Smartphone	12	6,2
Days in a week playing games		
● 1	31	15,9
● 2-3	44	22,6
● 4-5	48	24,6
● 6-7	72	36,9
Subjective level of gaming expertise		
● Casual gamer	29	14,9
● Mid-Core gamer	71	36,4

● Expert gamer	76	39
● Professional gamer	19	9,7
Preferred game genre		
● Role playing RPG	77	39,5
● Shooters	24	12,3
● Action / Adventure	34	17,4
● Online multiplayer	18	9,2
● Simulators	7	3,6
● Strategies	13	6,7
● Other	22	11,3

Source: Author's compilation of primary data

Questionnaire design

The full questionnaire form is presented in the Appendix № . This survey consists of five main blocks. The first part of the questionnaire is dedicated to demographic questions, as well as baseline data on gaming experience and preferences, such as favorite gaming genres, time spent playing and main gaming platform. The second block of questions aims to measure intent to purchase games, followed by a section devoted to finding out the level of gaming engagement. Engagement was measured using Brockmyer's (2009) gaming engagement scale based on flow state and involvement levels. The next batch of questions was designed to reveal respondent's main motivations to play videogames, and is constructed from 3 main questions. Respondents were asked to rate how important some game elements and activities are to them, how much they like some gameplay elements and activities, and how often they do certain things while playing games, followed by the list of statements connected to one of the theorized motivations. To rate the statements, the Likert scale from 1 ("Strongly disagree") to 5 ("Strongly agree") was used. . The last block of questions was focused on finding out the respondent's attitude towards game purchasing video games, subjective norms and behavioral control opinions. Some questions and

statements for this study were formulated in a similar manner to connected and relevant to the topic researches (Table №3):

Table №3 Questionnaire design

Variables	Questions and statements	Adapted from:
Action	Dynamic gameplay with constant events Gameplay that requires quick reactions Explosions Creating chaos and destruction Gameplay with a lot of gore and violence Use of weapons and guns	Yee(2016, 2006)
Social	The ability to gain an advantage and dominate other players Challenging other players Collaborate with other players to achieve a common goal Competitions with other players Help other players Create teams with other players	Yee(2016, 2006)
Mastery	Taking time to practice and master the game The ability to achieve the highest level of skill in the game Beating the game at the highest difficulty level Solving complex problems that may require several attempts to succeed Discovering unusual ways to progress through the game Gameplay that requires long-term planning and strategy	Yee(2016, 2006)
Achievement	Accumulation of a large amount of game resources and currency Making an effort to get every collectible in the game Obtaining all possible trophies and achievements in the game Completing all possible missions and opening all content in the game Strive to reach the maximum level of power Primarily focused on improving your level / stats	Yee(2016, 2006)
Immersion	Well-written storyline Close acquaintance with all the main characters and their stories Characters and creatures with interesting backstories and personality Immersion in another world Living out the life of another person / character An interesting and original game world with lore and history	Yee(2016, 2006)

Creativity	Customizing colors, styles, skins and settings Sophisticated visual style of the game Finding secrets and easter eggs Checking and testing what the game world allows you to do Spending a lot of time setting up or decorating and characters / locations / weapons Explore the game world just for the sake of exploration	Yee(2016, 2006)
Novelty	Unexpected events or decisions The presence of fresh and new ideas in the gameplay Using the latest developments and advanced technologies to create a game Experiment with objects in the game world to see what happens Test new strategies, weapon builds, character development methods Strive to try out all new content as quickly as possible	Yee(2016, 2006)
Diversion	The ability to create your own non-reality environment and influence events The ability to pretend that you are someone else / somewhere else Using games as a stress relief Playing video games to avoid thinking about some real life problems Playing games to change your surroundings or affect your mood Playing video games when you have other important things to do	Yee(2016, 2006)
Engagement	Games are an important part of my life When choosing how to spend my time, I often prefer video games. I spend a lot of time on games I spend a lot of time doing activities related to games (watching streams and tournaments, attending events) I am interested in following the news from the world of games (follow the news, read the articles) I may feel differently when I play video games (not like in real life) I may not notice anything around when I play Playing video games can make me lose my sense of reality I may not notice if someone speaks to me during the game Sometimes I notice that I can't stop playing I can play without thinking what and how I'm doing Games evoke strong emotions in me, both positive and negative.	Brockmyer et al. (2009)

Purchase Intent	What is the likelihood that you will purchase video games for PC or console in the future? Have you purchased PC or console video games? I'm interested in buying video games for PC and console I have a high interest in buying a PC or console video game in the near future (i.e. next 3 months) I will definitely buy PC or console games in the near future (i.e. next 3 months) I intend to buy a PC or video game video game in the near future (i.e. in the next 3 months)	Johnson (2019), Alhidari (2015)
Attitude towards game purchasing	In my opinion, buying a video game is a good thing. I approve the purchase of video games I don't consider buying video games a waste of money.	Aizen (1991)
Subjective norms	My friends and family do not see anything wrong with buying video games. If I decided to buy video games, people whose opinion is important to me would consider it a good idea. People whose opinions matter to me like video games	Aizen (1991)
Perceived behavioral control	I can afford buying video games If I want a game, then I can purchase it I have sufficient knowledge, resources and ability to purchase games	Aizen (1991)

Chapter 3. RESEARCH RESULTS AND DISCUSSION

This chapter is devoted to the presentation and discussion of research findings: statistical analysis results, such as regressions, are presented, analyzed, and applied into modern context.

In order to answer the questions posed in the prior analysis, several statistical tests were executed using IBM SPSS Statistics software for statistical analysis. Firstly, descriptive statistics were obtained for the studied scales (Table № 4):

Table №4 Descriptive statistics of studied scales

	Min	Max	Median	Std. Deviation	Var.
Action	7,0	30,0	18,436	4,6473	21,598
Social	6,0	28,0	17,585	5,1118	26,131
Mastery	6,0	30,0	17,708	5,1515	26,538
Achievement	6,0	30,0	16,938	5,3271	28,378
Immersion	11,0	30,0	25,308	3,9242	15,400
Creativity	12,0	35,0	26,200	4,2676	18,212
Novelty	6,0	25,0	17,077	3,3994	11,556
Diversion	6,0	25,0	16,656	4,3601	19,010
Purchase intent	4,0	24,0	17,718	5,5173	30,441
Engagement	16,0	59,0	37,969	9,5161	90,556
Attitude towards purchasing video games	4,0	15,0	13,215	2,2783	5,190
Subjective norms	5,0	15,0	11,487	2,5933	6,725
Perceived behavioral control	3,0	15,0	12,672	2,6873	7,222

Source: Author's Compilation of Primary Data

Based on the descriptive statistics obtained, we can note that for the motivational block, the most points are scored on immersion scale (more than 25.3) and creativity scale (26,2), which indicates that this motivation to playing games is most pronounced in this sample. The most

weakly expressed motivations for achievement and diversion are the average scores on these scales of 16.9 and 16.6, respectively. This can be interpreted as a view of games as first and foremost a visual experience and creative entertainment. Lower priority for achievement may show the predisposition for respondent to treat gaming like rest or activity, that does not necessarily need to be perceived as something that should be perfectly completed .While there is a certain amount of players who specifically seek out games that require grinding for achievements, it does not seem to serve as a main motive to pick up gaming.

Turning to the purchase intent scales, we see that the highest scores in relation to the purchase of video games are 13.2, which is almost close to the maximum (15). That can suggest that almost all respondents agree with and are ready to purchase games. On the other hand, the subjective norms are expressed lower (11.4), which can be interpreted as an influence of still-existing stigma on gaming. While being positive about video game purchasing, many respondents are still unsure of the opinions of other people.

Going directly to the statistical analysis of the acquired data, multiple regression analysis was carried out to determine the influence of game motivations on engagement and the following results were obtained:

Table №5 Motivations and engagement regression analysis

	Non-standardized coefficients		Standardized coefficients	t	p
	B	Standard error	beta		
(const)	3,767	4,774		,789	,431
Action	,213	,147	,104	1,449	,149
Social	,058	,141	,031	,410	,682
Mastery	-,054	,147	-,029	-,367	,714
Achievement	,115	,126	,064	,909	,365
Immersion	,146	,185	,060	,792	,429
Creativity	,057	,178	,026	,320	,749

	Non-standardized coefficients		Standardized coefficients	t	p
Novelty	,445	,213	,159	2,088	,038
Diversion	,928	,163	,425	5,712	,000
R2=0,335 F=11.7 p<0,01					
a. Dependent variable: Engagement					

Source: Author's Compilation of Primary Data

As can be noted, out of all types of game motivation, engagement is significantly influenced only by novelty at P <0.05 and diversion at P <0.01, which suggests that the higher the indicators for these motivations, the greater the level of engagement is among the study participants. While other factors have more power in motivation to start playing a game, they do not necessarily translate to the state of flow. On the other hand, while desires to experience something new or escape from problems do not stand out to respondents as main reasons to gaming, it is people with these intrinsic motivations who can become engaged in gaming the most. These variables explain 0.33% of the variance of the dependent variable (engagement) and the remaining 67% of engagement is dependent on other factors, which can lead to conclusion that engagement in gaming largely comes from elsewhere.

In order to test the hypothesis of engagement affecting purchase intention, another regression analysis was conducted with the following results:

Table № 6 Engagement and purchase intention regression analysis

	Non-standardized coefficients		Standardized coefficients	t	p
	B	Standard error	beta		
(const)	8,218	1,473		5,578	,000
Engagement	,250	,038	,432	6,645	,000
R2=0,18 F=44.1 p<0,01					
a.Dependent variable: Purchase intention					

Source: Author's Compilation of Primary Data

As can be noted, engagement significantly affects purchase intention at P <0.01.It can be concluded that the more engagement is, the higher the purchase intent becomes. However, the indication that R2 = 0.18   suggests that only 18% of the intention to buy is determined by engagement, and the remaining 82% of the intention depends on other factors. These missing factors might be reliant on financial or promotional factors.

It can be assumed that there is a possibility that consumer engagement mediates the relationship between motivations and purchase intention i.e. it is an engagement mediator that regulates the influence of motivation on the intention to purchase. To test this assumption, the analysis of moderation was used and the following results were obtained:

Table № 7 Moderation analysis

Dependent variable - purchase intention			
	Б	Standard error	p
Motivation	0,13	0,05	0,02
Engagement	0,57	0,24	0,07
R^2	0,22		
F	18,9 P<0,01		
Model Motivation - X Engagement - W	Б	Standard error	p
1 level Engagement (28,4)	0,06	0.02	0.001
2 level Engagement (37,9)	0,04	0.01	0.01
3 level Engagement (47,4)	0,02	0.02	0.37

Source: Author's Compilation of Primary Data

In this model, it can be seen that motivation and engagement separately significantly affects the intention to buy a video game at P <0.05. It accounts for 22% of buying intent. Further, referring to the results of moderation, it is discovered that with a low engagement level (1 level), motivation significantly affects the purchasing intent. With an increase in engagement (2 level), the influence of motivation on buying intention becomes lower, but still significant. Lastly, with a very high level of engagement, motivation ceases to affect the intention to buy a game P = 0.37. It

can be assumed that if the engagement is significant, then it doesn't matter what motivation a customer has, as the very involvement in video games completely mediates the desire to buy them. However, if the engagement is weak, then motives are becoming more important.

To test whether subjective norms, perceived behavior and perceived behavioral control affect purchase intention another multiple regression analysis was conducted:

Table № 6 TPB and purchase intent regression analysis

	Non-standardized coefficients		Standardized coefficients	t	p
	B	Standard error	Beta		
(const)	-10,167	2,850		-3,568	,000
Attitude towards purchasing video games	1,013	,269	,418	3,773	,000
Subjective norms	,626	,204	,305	3,074	,002
Perceived behavioral control	,064	,015	,255	4,202	,000
R2=0,36 F=27.3 p<0,01					
a. Dependent variable: purchase intention					

Source: Author's Compilation of Primary Data

Based on the results, it can be noted that the attitude towards the purchase of video games significantly positively affects the intent to purchase. Perceived behavioral control also significantly positively influences and Intrinsic motivation all these factors influence at P <0.01.

Subjective norms do not significantly affect the purchase intention. Moreover, subjective norms in general were not included in this model due to high collinearity, as, it is similar to other more significant variables and therefore was not included in the equation.

In order to create a more complete portrait of consumer behavior patterns in Russian gaming market, additional analyzes were conducted. With the help of a comparative analysis, the Student's t-test, it was determined by what kind of variables men and women differ:

	Levene Test for Equality of Variances		t-test		
	F	Значимость	т	ст.св.	Sig. (2-tailed)
Days in week playing games	9,617	,002	-3,712	193	,000
			-3,728	190,213	,000
Purchase intent	9,466	,002	-3,550	193	,000
			-3,568	188,804	,000
Engagement	4,530	,035	-,872	193	,385
			-,876	187,754	,382
Action	,471	,493	-5,511	193	,000
Social	,591	,443	-4,905	193	,000
Mastery	,012	,912	-4,290	193	,000
Achievement	,773	,380	-,506	193	,614
Immersion	2,449	,119	4,785	193	,000
Creativity	,000	,995	3,159	193	,002
Novelty	,178	,673	-,576	193	,565
Diversion	,268	,605	3,565	193	,000
Intrinsic motivation	,435	,510	-1,201	193	,231
Attitude towards purchasing video games	2,547	,112	,217	193	,828
Subjective norms	2,165	,143	1,288	193	,199
Perceived behavioral control	6,020	,015	-4,604	193	,000
			-4,634	185,044	,000

Source: Author's Compilation of Primary Data

Those scales on which men and women differ significantly are highlighted with significance. < 0.05. In order to understand who has significantly higher results on these scales, the table below is provided:

Table № 8 Differences between man and woman

Group statistics			
	Sex	N	avg
Days in a week playing	F	100	2,550
	M	95	3,116
Purchase intent	F	100	16,390
	M	95	19,116
Action	F	100	16,770
	M	95	20,189
Social	F	100	15,930
	M	95	19,326
Mastery	F	100	16,230
	M	95	19,263
Immersion	F	100	26,550
	M	95	24,000
Creativity	F	100	27,120
	M	95	25,232
Diversion	F	100	17,710
	M	95	15,547
Perceived behavioral control	F	100	11,850
	M	95	13,537

We can see that men play significantly more per day (average 3.1) than women (average). Coincidentally, in terms of intention to buy from women, the results are also lower. Women value immersion, creativity and diversion above other possible motivations in contrast to man, who indicated predisposition towards action and challenges. Women also express that they do not feel completely sure about their resources and knowledge on gaming.

At the last stage of the study, Pearson correlation analysis was conducted to see how age, the number of days a person plays and subjective level of experience is associated with motivation, purchase intent and involvement in games:

	Age	Days in a week playing	Subjective level of gaming expertize
Purchase intent	.281**	.415**	.495**
Engagement	,007	.436**	.396**
Action	.210**	.205**	.252**
Social	.161*	.239**	.258**
Mastery	,135	.175*	.232**
Achievement	.150*	.187**	.144*
Immersion	-,120	,026	-,092
Creativity	-,095	.226**	,140
Novelty	-,024	.255**	.298**
Diversion	-.172*	,116	-,031
Intrinsic motivation	,074	.304**	.250**
Attitude towards purchasing video games	,006	.293**	.196**
Subjective norms	-,034	.236**	.184*
Perceived behavioral control	.392**	.265**	.274**
**. Correlation is significant at the 0.01 level (2-tailed)			
*. Correlation is significant at the 0.05 level (2-tailed)			

Source: Author's Compilation of Primary Data

It can be observed that age has a significant relationship with the intention to buy video games 0.28 at $P < 0.01$, which suggests that the higher the respondent's age, the higher the intention to buy video games. Moreover, age has positive correlation with respondent's purchase behavioral control elements, which can be interpreted as the older players feeling they have more resources and knowledge to be purchasing video games. At the same time, age is negatively associated with Diversion motivation (-0.17 at $P < 0.05$), which suggests that the higher the age, the less important the desire to find comfort and escape from real world problems becomes for players in this sample. Days spent playing has a positive relationship with engagement and purchase intent along with subjective level of gaming.

Conclusion

As a result of this study, the main models of consumer behavior in online context were studied, the development of motivational theories in gaming were explored, the phenomenon of engagement in the context of the flow was defined, and the state of global and Russian gaming markets were determined. Based on the results of the exploratory study, the relationship between the factors of motivation, gaming engagement and on the intention to purchase video games was established.

Theoretical contributions

This study continues existing academic discussion on the role of motivations in game design and marketing, following up on the works of Yee (2016) and Alhaidari (2015). The exploration of gaming engagement through the state of flow expands the existing reach of research on the topic of consumer engagement.

This study examined the relationship between player's motivations, gaming engagement and its effects on purchase intention. It was found that respondent's novelty and diversion motivations to play games predicate gaming engagement contextualized as a state of flow. Other motivations, on the other hand, while appearing to be a more common reason to start playing games, do not necessarily influence gaming engagement and induce flow state. While creativity and immersion has shown to be one the primary motives for game playing, it is usually a combination of factors that drives processes that initiate, guide, and maintain gaming behavior.

In regards to gaming engagement findings show that it has a positive relationship with purchase intention, however, it accounts only for a part of buying decision. Another one of the major goals of this research was to establish a connection between gaming motivation and purchase intention using engagement as an explanatory factor. It was established that engagement serves as a mediator between consumer's motivation to play and purchase intent. In cases where the levels of engagement are significant, initial motivation matters less, as the very engagement in video games completely mediates the desire to buy them, however, if the engagement is weaker, then motivation becomes increasingly more important in digital spaces. Moreover, some additional evidence to the influence of behavioral attitude and control on behavioral intent in the context of online media.

Managerial implications

Video games are perceived first and foremost as visual and creative experiences, highlighting the importance of art during production. For game development companies it implies usage of the latest available visual technologies. This would include engines, program versions and optimization efforts. Often companies can stick to using a certain set of tools for a prolonged period of time due to switching costs and time needed for developers to study and understand new technology. With the usual production time of several years and rapid development of the industry, it can lead to old on release games that cannot satisfy consumers' need for visual and creative satisfaction when compared to other available products. Additional implication is prioritizing art development during production planning as one the most important steps, allocating sufficient time and resources needed to create a high quality level of visual language. For publishers, the development companies that can provide the highest quality of visual content become number one candidates. For marketers, primary desire for creativity and immersion is significant in a way of them becoming a focal point in marketing campaigns.

Findings on the relationship between motivation, engagement and purchase intent highlight the benefits of developer-publisher relationship, where resources between game development and marketing campaigns should be divided accordingly. With the resurgence of small independent game development companies, it is important to understand the drivers behind purchase intent, which do not always lie in internal motivations to play games. Building a strategy solely on the creation of high-quality products that try to cater to every potential motivation to gaming may not necessarily lead to financial success for the game, as it might not reach its intended consumer due to the highly competitive and saturated nature of the market. This notion is supported by the current state of the industry, where almost 37% of the games available on online services for digital distribution of computer games and programs have never been purchased once (Backlinko, 2021). Game development efforts should be supported by significant marketing efforts, which in the gaming industry can most competitively be conducted by publishing companies.

While conducting additional data analysis, it becomes clear that man and woman experience gaming differently, from initial goals to purchase intent. Acquired data provides additional proof that while most games high-budget titles are created mostly with a male consumer in mind, additionally catering to women's motivations can prove to attract more audience. While not to the same degree as man, women still display high levels of motivation to play and purchase video games. Product design that takes into consideration women's motivations and experiences

while playing can help female players perceive gaming as an acceptable option to satisfy their entertainment needs.

Study limitations and future research

One of the main limitations of this research is the usage of already existing theoretical models to explore motivational factors of gaming. For future research, initial factor analysis of potential gaming motivations can help establish a more contemporary and relevant model. Additionally, the usage of experimental design as a way to establish causal relationships can provide a higher validity of results for cognitive studies.

For future research, a more in depth investigation on the role of gender in playing video games and consuming virtual products could potentially open up new understandings of market dynamics. A study like this could analyze how interactive environments shape consumer behavior. Moreover, an exploration on purchase intent between different game genres and platforms could provide new connections between purchase intent, motivations and engagement, as in-game mobile purchasing, for example, is a very different process to buying a full PC or console game, explored in this study.

List of References

1.   Avetisova, A. A. (2011), "Psychological Features of Computer Gamers. Psychology", *Journal of the Higher School of Economics*, 8 (4), 35-58.

2.   Abdul-Ghani, E., Hyde, K., Marshall, R. (2011). Emic and etic interpretations of engagement with a consumer-to-consumer online auction site. *Journal of Business Research*, 64(10)

3.   Alba, J. W, Williams, E. (2012). Pleasure principles: A review of research on hedonic consumption. *Journal of Consumer Psychology*, 23(1), 2-18.

4.   Brockmyer, J., (2009). The development of the Game Engagement Questionnaire: A measure of engagement in video game-playing. *Journal of Experimental Social Psychology*, 45(4), 624-634.

5.   Brodie, R., Hollebeek, L. (2011). Customer engagement: conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research* 66(1), 105 114.

6.   Brown, E., Cairns, P. (2004). A grounded investigation of game immersion.

7.   Calvillo-Ga´mez EH, Cairns P, Cox AL (2015) Assessing the core elements of the gaming experience, 37–62.

8.   Chen, M., Kolko, B., Cuddihy, E. (2011). Modeling but NOT measuring engagement in computer games.

9.   Chen, M., Beth E, Cuddihy, E (2005). Modeling and measuring engagement in computer games.

10.   Chou, T., Ting, C. (2003). The role of flow experience in cyber-game addiction. *CyberPsychology & Behavior*, 6(6), 663-675.

11.   Cole, H., Griffiths, M. (2007). Social interactions in massively multiplayer online role-playing gamers. *CyberPsychology & Behavior,* 10(4), 575-583.

12.   Csikszentmihalyi M. (1990) Flow: The psychology of optimal experience. New York, Harper and Row.

13.   Finneran, C, & Zhang, P. (2005). Flow in computer-mediated environments: promises and challenges. *Communications of the Association for Information Systems*, 15(1), 4-6.

14.   Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343-353.

15.	. Gordeeva, T.O. (2010), "Self-determination theory: present and future. Part 1: The problems of theory development", *Psikhologicheskie Issledovaniya*, 4 (12)

16.	Griffiths, M. D., Davies, M. N.O., & Chappell, D. (2004). Demographic factors and playing variables in online computer games. *CyberPsychology & Behavior*, 7(4), 479-487

17.	Hainey T., Connolly T.(2011) The differences in motivations of online game players and offl ine game players: A combined analysis of three studies at higher education level. Computers & Education, 57(4), 2197–2211

18.	Hirschman, E., Holbrook, M.. (1982). Hedonic consumption: emerging concepts, methods and propositions. *The Journal of Marketing*, 92-101.

19.	Hoffman, D., Novak, T. (2009). Flow online: lessons learned and future prospects. Journal of Interactive Marketing, 23(1), 23-34.

20.	Hsu, C., Lu, H. (2004). Why do people play on-line games? An extended TAM with social influences and flow experience. *Information & Management*, 41(7)

21.	Ivanova, N. (2016) Online gaming motivation according to Self-Determination Theory (SDT). *Vestnik of Saint-Petersburg University*. 16(2), 47–58.

22.	Kazakova, N.. (2017) Game design -artistic and project approach to the creation of a digital gaming environment. Russian state university named after a. N. Kosygin, 68-82

23.	.Kerlinger, F., & Lee, H. (2000). Foundations of behavioral research (4th Ed.): Harcourt College Publishers.

24.	Korzaan, M. (2003). Going with the flow: predicting online purchase intentions. *Journal of Computer Information Systems*, 43(4), 25.

25.	Koufaris, M. (2002). Applying the technology acceptance model and flow theory to online consumer behavior. *Information Systems Research*, 13(2), 205-223.

26.	Lafreniure M.,. K. Verner-Filion J., Vallerand R. J.(2012) Development and validation of the Gaming Motivation Scale (GAMS). Personality and Individual Differences, 53(1) 827–831

27.	Li, D., Liau, A. (2011). Examining the Influence of Actual-Ideal Self-Discrepancies, Depression, and Escapism on Consumer Behavior

28.	Luna, David, Peracchio, Laura A, & de Juan, María D. (2003). Flow in individual Web sites: Model estimation and cross-cultural validation. Advance in Consumer Research, 30

29. Maslow, A.. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370.

30. Mollen, A., & Wilson, H. (2010). Engagement, telepresence and interactivity in online consumer experience: Reconciling scholastic and managerial perspectives. *Journal of Business Research*, 63(9), 919-925.

31. Murphy, C. (2011). Why games work and the science of learning. Interservice, Interagency Training, Simulations, and Education Conference.

32. Myers, David. (1990). A Q-study of game player aesthetics. Simulation & Gaming, 21(4), 375- 396.

33. Novak, Thomas P, Hoffman, Donna L, & Yung, Yiu-Fai. (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, 19(1), 22-42.

34. Procci, Katelyn, James, Nicholas, & Bowers, Clint. (2013). The Effects of Gender, Age, and Experience on Game Engagement. Paper presented at the Proceedings of the Human Factors and Ergonomics Society Annual Meeting.

35. Przybylski, Andrew K, Rigby, C Scott, & Ryan, Richard M. (2010). A motivational model of video game engagement. *Review of General Psychology*, 14(2), 154.

36. Przybylski A. K., Ryan R. M., Rigby C. S. (2009). The motivating role of violence in video games. *Personality and Social Psychology Bulletin*, 35(2), 243–259.

37. Russoniello, C. V., O'Brien, K., & Parks, J. M. (2009). The effectiveness of causal video games in improving mood and decreasing stress. Journal of CyberTherapy & Rehabilitation, 2(1), 53-66.

38. Sedykh, Inna. (2020). Computer game industry. National Research University High School of Economics Development center

39. Seger, Jeff, & Potts, Richard. (2012). Personality Correlates of Psychological Flow States in Videogame Play. Current Psychology, 31(2), 103-121

40. Sherry, John L. (2004). Flow and media enjoyment. Communication Theory, 14(4), 328-347.

41. Van Doorn, Jenny, Lemon, Katherine N, Mittal, Vikas, Nass, Stephan, Pick, Doreen, Pirner, Peter, & Verhoef, Peter C. (2010). Customer engagement behavior: theoretical foundations and research directions. *Journal of Service Research*, 13(3), 253-266.

42.   Verhoef, Peter C, Reinartz, Werner J, & Krafft, Manfred. (2010). Customer engagement as a new perspective in customer management. *Journal of Service Research*, 13(3), 247-252

43.   Voiskounsky A., Wang S. (2014) Flow Experience While Computer Gaming: Empirical Study. *Open Journalof Social Sciences*. 2, 1–6.

44.   Voss, Kevin E, Spangenberg, Eric R, & Grohmann, Bianca. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research*, 40(3), 310- 320.

45.   Voyles, Bennett. (2007). Beyond loyalty: meeting the challenge of customer engagement. Economist Intelligence Unit

46.   Williams, D., Yee, N., & Caplan, S. E. (2008). Who plays, how much, and why? Debunking the stereotypical gamer profile. *Journal of Computer-Mediated Communication*, 13(4), 993-1018.

47.   Wolfe, A (2016) Massively Multiplayer Online Gamers: Motivations and Risks. *Counseling and Psychological Services Dissertations*. Paper 74.

48.   Yee, N. (2016). The gamer motivation profile: What we learned from 250,000 gamers. Proceedings of the 2016 Annual Symposium on Computer-Human Interaction in Pl, 2-2

49.   Yee, N. (2006). Motivations for play in online games. CyberPsychology & Behavior, 9(6), 772-775.

50.   Yee, N. (2006). The demographics, motivations, and derived experiences of users of massively multi-user online graphical environments. Presence: Teleoperators and Virtual Environments, 15(3), 309–329.

51.   Zichermann, Gabe, & Cunningham, Christopher. (2011). Gamification by design: Implementing game mechanics in web and mobile apps.

Appendix 1. Game development pipeline

	PRE PRODUCTION		PRODUCTION							POST PRODUCTION		

ART

Pre production		Prototype	Critical Whitebox	Secondary Whitebox	Texturing	Set Dressing	Marketing Materials			Release Materials
							Setups	Critical Path	Optimisation	Polish

DESIGN

Treatment	GDD	Story Development					Story Moments	Balancing	Full Experience	Polish	Testing
		Core Loops	Play Beats	Prototype	Level Fidelity	Mechanics Setup					

DEVELOPMENT

Tech Specs	Tools Setup	Infrastructure	Prototype	Level Fidelity	Mechanics Setup	Story Moments	Balancing	Full Experience	Polish	Certifications

PRODUCTION

Direction	Staffing Plan	Budgeting	Schedule	Legal	Pipeline Management	Gov Compliance	Licenses	Copywriting	Internationalization

MARKETING

Market Research	Distribution	PR Strategy	Industry Reveal	Announcement	Dev Interviews	Game Content	Community Management			
							Press Negotiations	Media Saturation	Reviews	Launch Event

Appendix 2. The questionnaire
Раздел 1. Профайл респондента

Пол	• Мужской • Женский
Возраст	• <18 • 36-40 • 18-21 • 41-55 • 22-25 • 56-60 • 26-30 • ≥61 • 31-35
Сколько дней в неделю вы проводите хотя бы 30 минут, играя в видеоигры?	• 0-1 • 2-3 • 4-5 • 6-7
Вы бы описали себя как:	• Казуальный игрок: играете немного или нерегулярно • Увлекаюсь играми: довольно часто играете в видеоигры • Эксперт: много играете в видеоигры • Профессионал: серьёзно или профессионально занимаетесь играми
На какой из этих платформ вы больше всего играете?	• Консоль: Play Station, Xbox, Nintendo Switch • PC/Mac: Персональный компьютер или ноутбук • Смартфон/Планшет: Android, iOS • VR
Выберите жанр видеоигр, который вы наиболее предпочитаете:	• Экшн / Приключения • Спорт • Ролевые игры RPG • Стратегии • Шутеры • Симуляторы • Онлайн мультиплееры • Головоломки • Карточные коллекционные игры • Другое:

В какие из последних игр (выпущенных за последние несколько лет) вам понравилось играть? (необязательно)	
Вы в настоящее время играете в какие-нибудь мобильные игры или игры для планшетов? (необязательно)	
Ваши любимые игры:	

Раздел 2.

Приобретали ли вы видеоигры для ПК или консоли?	● Нет, не приобретал/а ● Да, но только несколько раз ● Да, иногда приобретаю ● Да, часто приобретаю ● Да, постоянно приобретаю

Какова вероятность, что вы будете приобретать видеоигры для ПК или консоли в будущем?

Абсолютно маловероятно	Не очень вероятно	Вероятно	Очень вероятно	Максимально вероятно
1	2	3	4	5

Оцените, пожалуйста, каждое высказывание по шкале от 1 до 5, где 1 – это "полностью не согласен(на)", 5 – "полностью согласен(на)".

Полностью не согласен				Полностью согласен
1	2	3	4	5

Я заинтересован/а в покупке видеоигр для ПК или консоли	1	2	3	4	5
У меня высокий интерес к покупке видеоигры для ПК или консоли в ближайшем будущем (т.е. в следующие 3 месяца)	1	2	3	4	5

Я обязательно буду покупать игры для ПК или консоли в ближайшем будущем (т.е. в следующие 3 месяца)	1	2	3	4	5
Я намерен/а купить видеоигру для ПК или консоли в ближайшем будущем (т.е. в следующие 3 месяца)	1	2	3	4	5

Раздел 3.

Оцените, пожалуйста, каждое высказывание по шкале от 1 до 5, где 1 – это "полностью не согласен(на)", 5 – "полностью согласен(на)".				
Полностью не согласен				Полностью согласен
1	2	3	4	5

Игры являются важной частью моей жизни	1	2	3	4	5
Выбирая, как провести время, я часто отдаю предпочтение видеоиграм	1	2	3	4	5
Я уделяю играм много времени	1	2	3	4	5
Я провожу много времени за активностями, связанными с играми (просмотр стримов и турниров, посещение тематических мероприятий)	1	2	3	4	5
Мне интересно следить за новостями из мира игр (следить за новинками, читать статьи)	1	2	3	4	5
Я могу ощущать себя по-другому, когда играю в видеоигры (не так, как в реальной жизни)	1	2	3	4	5
Я могу не замечать ничего вокруг, когда играю	1	2	3	4	5
Играя в видеоигры, я могу потерять ощущение реальности	1	2	3	4	5
Я могу не заметить, если кто-то заговорит со мной во время игры	1	2	3	4	5
Иногда я замечаю, что не могу перестать играть	1	2	3	4	5
Я могу играть не думая, что и как я делаю	1	2	3	4	5
Игры вызывают у меня сильные эмоции, как положительные, так и негативные	1	2	3	4	5

Иногда я могу играть дольше, чем изначально планировалось	1	2	3	4	5
Зачастую я полностью погружаюсь в процесс игры	1	2	3	4	5
Я теряю счет времени, когда играю в видеоигры	1	2	3	4	5

Раздел 4.

Насколько **важны** для вас следующие элементы и занятия, когда вы играете в видеоигры?				
Абсолютно не важно	Не очень важно	Немного важно	Важно	Чрезвычайно важно
1	2	3	4	5

Накопление большого количества игровых ресурсов и валюты	1	2	3	4	5
Продуманная сюжетная линия	1	2	3	4	5
Кастомизация цветов, стилей, скинов и параметров настройки	1	2	3	4	5
Возможность получения преимущества и доминация над другими игроками	1	2	3	4	5
Прилагать усилия, чтобы получить каждый коллекционный предмет в игре	1	2	3	4	5
Близкое знакомство со всеми главными героями и их историями	1	2	3	4	5
Проработанный визуальный стиль игры	1	2	3	4	5
Уделять время на практику и овладение игрой	1	2	3	4	5
Получение всех возможных трофеев и достижений в игре	1	2	3	4	5
Возможность достичь высшего уровня мастерства в игре	1	2	3	4	5
Прохождение игры на самом высоком уровне сложности	1	2	3	4	5
Решение сложных задач, которые могут потребовать несколько попыток для успеха	1	2	3	4	5

Персонажи с интересными предысториями и характером	1	2	3	4	5
Возможность создавать собственное отличное от реальности окружение и влиять на события	1	2	3	4	5
Неожиданные события или решения	1	2	3	4	5
Возможность представлять, что вы кто-то другой/ где-то в другом месте	1	2	3	4	5
Открытие необычных способов прохождения игры	1	2	3	4	5
Выполнение всех возможных миссий и открытие всего контента в игре	1	2	3	4	5
Наличие свежих и новых идей в игровом процессе	1	2	3	4	5
Использование новейших разработок и передовых технологий для создания игры	1	2	3	4	5
Интересный и оригинальный игровой мир с продуманной историей	1	2	3	4	5

Насколько вам **нравятся** следующие игровые элементы и занятия?				
Абсолютно не нравятся	Не очень нравятся	Немного нравятся	Нравятся	Чрезвычайно нравятся
1	2	3	4	5

Динамичный игровой процесс с постоянными событиями	1	2	3	4	5
Погружение в другой мир	1	2	3	4	5
Противостояние и соревнование с другим игроками	1	2	3	4	5
Геймплей, требующий быстрой реакции	1	2	3	4	5
Геймплей, требующий долгосрочного планирования и стратегии	1	2	3	4	5
Взрывы!	1	2	3	4	5
Поиск секретов и пасхалок	1	2	3	4	5
Работать совместно с другими игроками для достижения общей цели	1	2	3	4	5

Создавать хаос и разрушения	1	2	3	4	5
Геймплей с большим количеством крови и насилия	1	2	3	4	5
Использование оружия и взрывчатки	1	2	3	4	5
Соревнования с другими игроками	1	2	3	4	5
Вживаться в роль другого человека/персонажа	1	2	3	4	5
Помогать другим игрокам	1	2	3	4	5
Создавать команды с другими игроками	1	2	3	4	5
Тестировать новые стратегии, сборки оружия, методы развития персонажей	1	2	3	4	5

Как **часто** вы делаете следующее, когда играете в видеоигры?				
Никогда	Редко	Иногда	Часто	Всегда
1	2	3	4	5

Проверяете и тестируете, что игровой мир позволяет делать.	1	2	3	4	5
Тратите много времени на настройку и кастомизацию персонажей / локаций/ оружия	1	2	3	4	5
Используете игры как средство для снятия стресса					
Исследуете игровой мир просто ради исследования	1	2	3	4	5
Играете в видеоигры, чтобы не думать о некоторых реальных проблемах	1	2	3	4	5
Экспериментируете с объектами в игровом мире, чтобы увидеть, что произойдет	1	2	3	4	5
Играете в игры, чтобы сменить обстановку или повлиять на свое настроение	1	2	3	4	5
Стремитесь достичь максимального уровня могущества	1	2	3	4	5

В первую очередь сосредоточены на повышении вашего уровня/статистики	1	2	3	4	5
Стремитесь попробовать весь новый контент как можно быстрее	1	2	3	4	5
Играете в видеоигры, когда есть другие важные дела.	1	2	3	4	5

Раздел 5.

Полностью не согласен				Полностью согласен
1	2	3	4	5

По-моему мнению, приобретение видеоигр- это хорошо.	1	2	3	4	5
Я одобряю приобретение видеоигр	1	2	3	4	5
Я не считаю приобретение видеоигр пустой тратой денег	1	2	3	4	5
Мои друзья и близкие не видят ничего плохого в приобретении видеоигр.	1	2	3	4	5
Если бы я решила приобрести видеоигры, люди, чье мнение для меня важно, посчитали бы это хорошей идеей	1	2	3	4	5
Людям, чье мнение для меня важно, нравятся видеоигры	1	2	3	4	5
Я могу позволить себе приобретение видеоигр	1	2	3	4	5
Если я захочу игру, то я смогу её приобрести	1	2	3	4	5
Я обладаю достаточными знаниями, ресурсами и возможностями для приобретения игр	1	2	3	4	5