

What Drives Consumption in Online Games? Homo Socio Interneticus Approach

Andika Mahardika¹, Arthur Josias Simon Runturambi¹, Mohamad Dian Revindo¹

¹ School of Strategic and Global Studies University of Indonesia, Jl Salemba Raya No. 4, Jakarta, Indonesia

Abstract – The current development of online gaming technology can facilitate social interaction, forming a virtual society. This social interaction is continued with economic interaction, namely the consumption of online games. This research uses a multidisciplinary approach to understand consumption behavior in online games. The research takes place in Jakarta, Indonesia, and interviews three key opinion leaders in online game communities. This is qualitative research using grounded theory. The results show that microtransactions in online games are driven by the influence of structural and cultural dimensions in a virtual society, in this case, online games. In the context of virtual society, structural dimensions of pressure are found in the form of exploitation by developers and communities. However, online players resist and reconfirm these structural and cultural pressures, such as stopping consumption. So, there is duality in the social structure of virtual society. This adds new perspectives to existing research more concerned with monetization strategy.

Keywords – Interneticus, community, consumption, virtual, games.

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Corresponding author: Andika Mahardika,
School of Strategic and Global Studies University of
Indonesia, Jl Salemba Raya No. 4, Jakarta, Indonesia


Email: andika.mahardika01@ui.ac.id

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1. Introduction

The development of the virtual economy has become one of the strategic issues that have attracted the attention of academics as a research topic, especially in online games. Information and communication technology development has become the impetus for the development of the virtual world. This is because technology can facilitate social interaction, forming a social environment often called a virtual society [1].

In a social environment, virtual goods transactions occur using virtual currency, where individuals are represented in the form of avatars¹. The accumulation of these transactions creates an economic system known as the virtual economics. In the online games business, there are structures that dominate and influence, such as developers, the games community, and pro players themselves. Game developers create all aspects of online games, such as characters, stories, gameplay, space, virtual graphics, etc.

Economic exploitation by developers causes the consumption of online games [2]. This happens in the "free" game category, where players do not need to pay for game access, but to advance to the following stage, players are indirectly required to buy virtual goods to complete that stage quickly. The research results above were carried out at the individual level, not at the social structure of virtual society in online games.

Consumption in academic studies always involves individuals as actors, so the researcher's perspective on humans as actors is very important and determines the point of view on consumption itself. Based on the literature study conducted, at least 5 (five) points of view to see humans as actors in the context of consumption, namely: (1) Homo economicus; (2) Homo Sapiens; (3) Homo Socius; (4) Homo Interneticus and (5) Homo Eco-Interneticus.

Using the point of view that humans are homo economicus, then the characteristics of consumption behavior will be rational by using appropriate, limited resources [3].

As a consequence, the characteristics of consumption behavior become characteristic optimization, no self-control (consumer sovereignty), unbiased beliefs, and self-interest [4].

Hence, psychological factors are removed from the individual as an agent; thereby generalizations can be made from consumption (there are no psychological factors in the decision-making process); therefore, consumption is not a substantive matter. As a result, economics focuses more on production and distribution.

As homo sapiens, there are no generalizations of individual consumption. Consequently, consumption has a substantive role that can be intervened through "choice architecture" whereby deviations in consumption behavior are as expected. According to Thaler and Kahneman (2021), individuals as homo sapiens have two thinking systems, namely: (1) Automatic thinking system and (2) reflectionist thinking system. The characteristics of automatic thinking systems are fast, low consequences, and mostly repetition. In contrast, the reflection is a thinking system that needs time, high consequences, and mostly a new situation.

As a result of the development of information technology, especially internet networks, there is a new way of viewing individuals as homo interneticus [5],[6], where there is a new reality in virtual world (on the network). Individuals are related to each other through a network represented by an avatar. Michael Goodbaher (2004) defines homo interneticus as a new form of human evolution in terms of abilities to communicate. In other words, the internet (network) changes human life patterns.

Another alternative point of view that influences consumption is the individual as homo socius (social creature). In the context of consumption, individuals are very social creatures influenced by the social environment. The question is whether individual can act as homo socius and homo interneticus in same time.

Our study uses the perspective of the individual as Homo Socio-Interneticus for the following reasons: (a) technological developments that can facilitate social interaction will influence individual consumption behavior in online games; (b) The presence of groups in online games, whether in the form of small groups or large communities, reflects the social environment that influences individuals.

The role of technology changes the social structure in the virtual world, which results in differences from the real world, especially in the concepts of space and time. However, both have the same foundation in the interaction between structure and individual.

The system of virtual society also has its own binding rules. The interaction between individuals and structures results in the reproduction of the social practices of virtual communities through the methods of awareness and power practices carried out by these individuals. This can result in reconfirmation or transmutation of the structure of virtual society. The duality resulting from this interaction is called structuration [7].

Based on the explanation above, this research aims to understand and explain (1) How the social structure in a virtual society (online games platform) is formed in the relationship between power relations and individual conscious behavior, and (2) How this social structure influences consumption behavior in a virtual society and what factors drive consumption based on a socio-interneticus approach.

The contribution of this research is to discover how the social structure in a virtual society influences individual consumption behavior in an online games community, while in contrast, some previous research focused on understanding consumption in terms of micro virtual economics perspective [8], visual graphic and spatial technology [9], and effect of consumption into individual, society and environment [10],[11],[12],[13].

2. Methodology

This section will explain the research methodology. The research uses a qualitative method with grounded theory. The conceptual framework was developed based on structuration theory, and there are two stages of frameworks. First, its initial framework is developed based on a literature review of current research. The second stage is designed based on collected data (interview data).

2.1. Conceptual Framework

The method used to answer the research questions above was grounded qualitative theory. This research is inductive but uses the structuration theory by Giddens (2004) as a reference theory to understand the social structure in a virtual society. This theory states that an interaction between elements in a social structure causes fundamental changes in the social structure. There are two dimensions of analysis: the structural analysis dimension and the individual analysis dimension. The structural analysis dimension consists of significance, legitimacy, and dominance (power relations), while the individual analysis dimension consists of reflective monitoring, rationalization, and motivation.

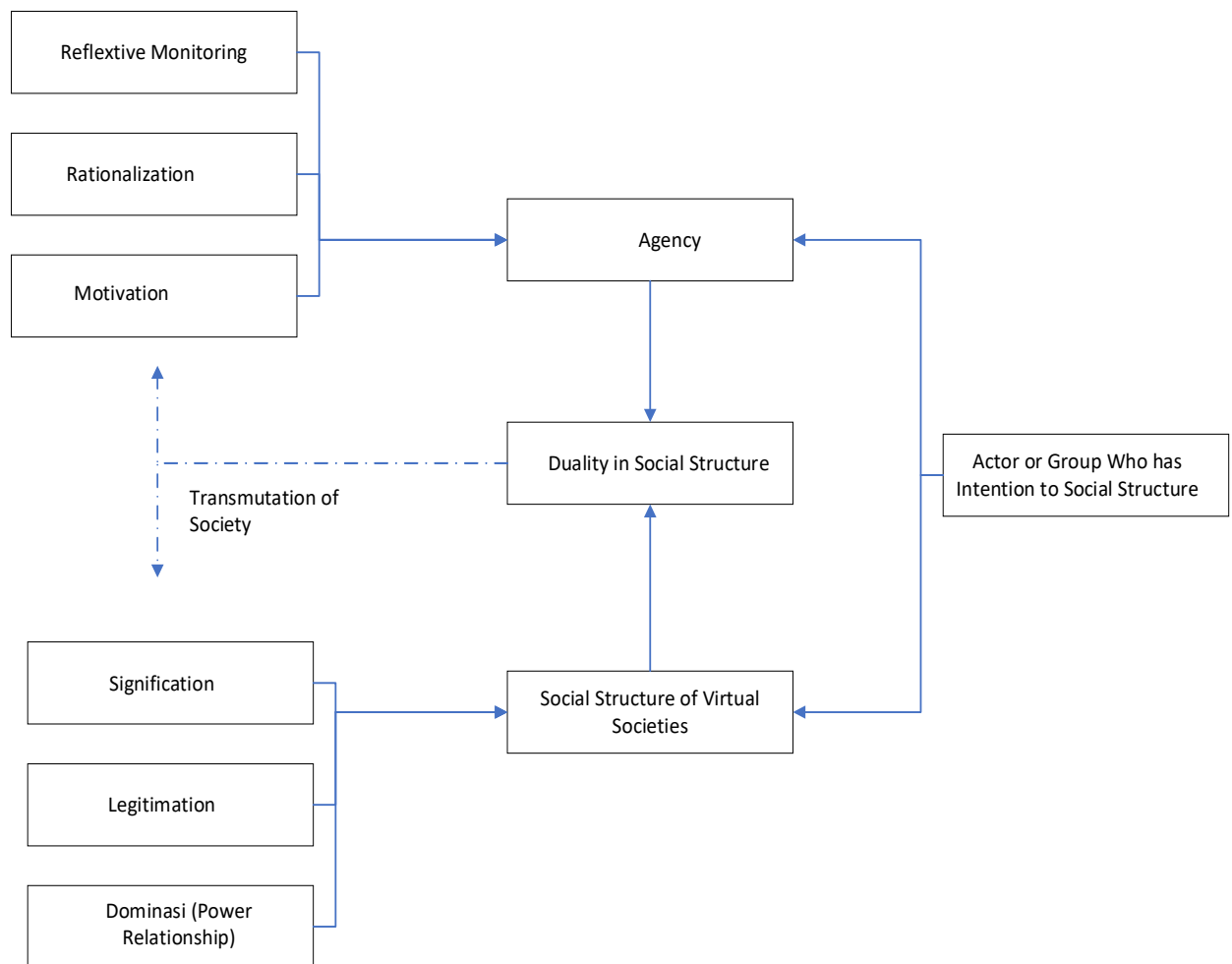


Figure 1. Conceptual framework based on structuration theory (As an Initial Reference)[4].

The primary reference to structuration theory is depicted in Figure 1. Structure is an institution/ body that has resources and norms to influence the individual as an agent. It has three primary parameters: signification, legitimation, and domination. Signification is a symbolic way to influence the individual through a scheme or game stage. Legitimation is a normative legalization through social reward and punishment. Domination is influenced by market power. In contrast, individuals have three parameters to resist or to confirm the structure: reflective monitoring, rationalization, and motivation. Reflective monitoring is individual behavior power to stop or to re-adjust the domination of structure before it is affected. Rationalization is individual conscious behavior that resists the structure after being affected. Motivation is the ability of an individual to rethink when the initial motivation cannot be reached.

Parameters on structural and individual analysis dimensions are followed by a conceptual framework based on literature studies and previous research. That leads to the conceptual framework illustrated in Figure 2. The conceptual framework above also serves as an initial hypothesis that will be developed or changed based on data obtained in the field.

Figure 2 shows the initial hypothesis developed based on the recently published issue. In online games, players are differentiated based on the level of the game [14], where players with high ranks will have better visual graphic experiences [3]. This is a form of signification based on structuration theory. Before players start the games, players need to agree with the End User License Agreement (EULA), most of it is in favor of the developer [15]. The player also has a chance to do monetization in online games [8]. Previous research findings prove that the structure using resources, norms, and legalization to dominate the social system in online games.

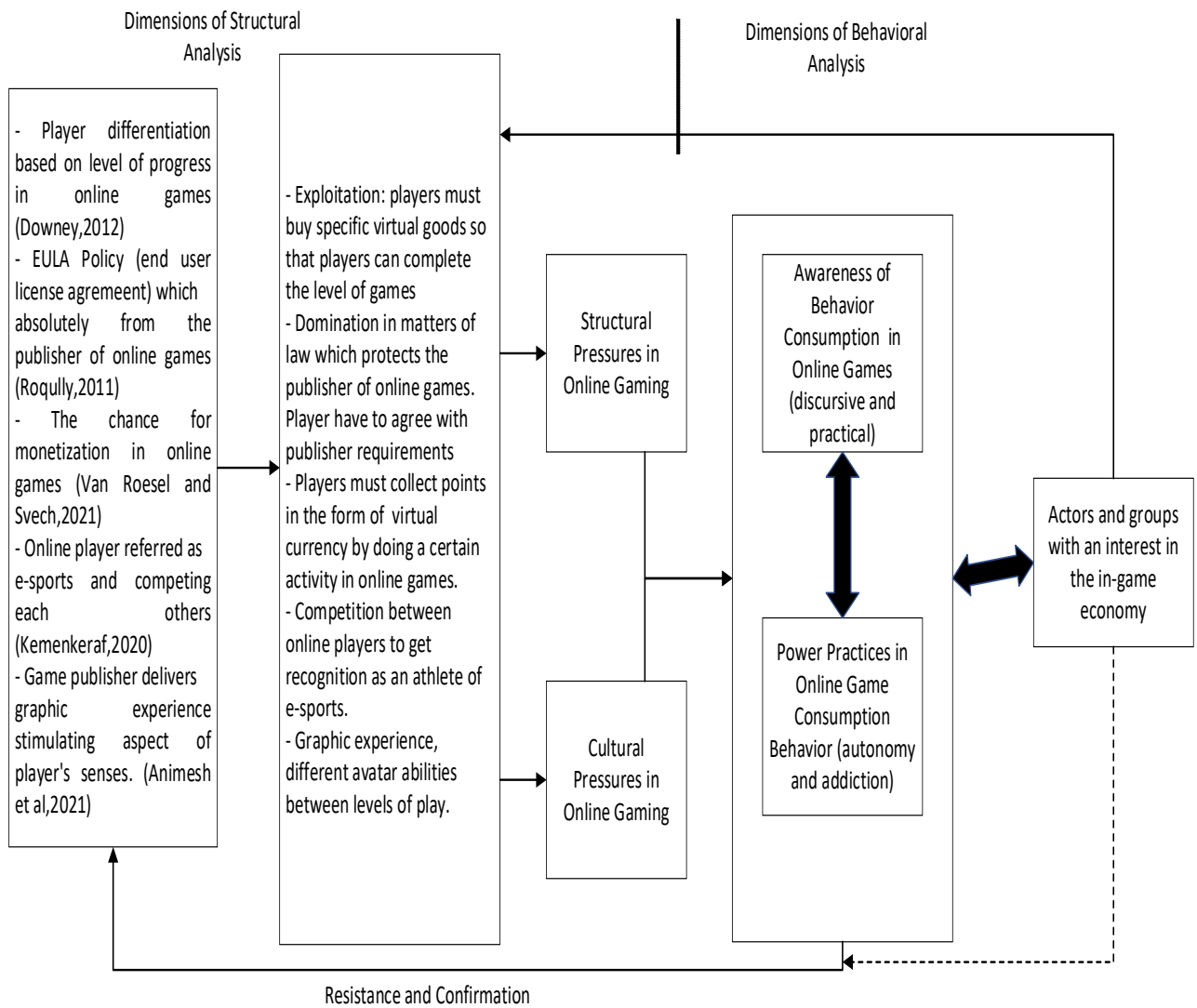


Figure 2. Initial conceptual framework based on literature study (Development from Giddens, 2004)

Based on the conceptual framework developed above, a research instrument was formed in the form of interview questions for online users.

The research instrument is in the form of questions based on indicators, and variables developed using structuration theory as a reference, as explained in Table 1.

Table 1. Research instrument

Indicator	Variable	Questions	Explanation
Domination	Developer and Publisher Domination	How do you resolve problems or disputes with online game developers/publishers?	This question is to get the facts about whether there is domination by developers/publishers so that players do not have rights if there are problems related to consumption on online gaming platforms.
Legitimacy	Community legitimacy	Is it your community helping at every stage of the game?	This question is to see the role of the community in players' consumption behavior on online platforms.
Exploitation	Player exploitation	How do you complete the game stages? Can you complete the stage without purchasing virtual goods on the online gaming platform, and why?	This question is to get facts about player exploitation by developers so that players or the community have to buy virtual goods.
Signification	Competition between communities	What makes you feel necessary to make your community better than others Is it necessary to buy virtual goods to make your community better than others?	This question is to get facts about the significance between communities, which ultimately influences the consumption behavior of players in the community.
Reflective Monitoring	Power behavior	Have you ever stopped consuming online games even though you lost the game, and why?	This question is to prove that the player has carried out power behavior, namely stopping consumption before it happens.
Rationalization	Conscious behavior	Have you ever realized that consumption of online games affects your real life?	This question is to determine whether the player has carried out awareness behavior, namely, realizing excessive consumption after doing it.
Motivation	Motivation to buy	What is your primary motivation for buying virtual goods in online games? What is your primary motivation for becoming part of the community?	This question is to find facts about motivation to buy virtual goods.

2.2. Data Collection

Data was collected by interviewing three key opinion leaders in virtual communities. First, the leader of the Shokuzai communities with 60-70 members. This community also has six subsidiary communities classified by age, gender, and game section. The interview took place in September 2022. The second source is the GPX community leader, who focuses more on becoming e-sport athletes and has 20-30 members. The third community is Golkar E-Sport, which has more than 100 members.

3. Results

This section will explain research findings based on the parameters explained in section 2 above and how they form in social systems in online games. Based on the results of interviews from the three communities, codification was carried out (attachment 2). The section is divided into 7 subsections. Subsections 3.1 – 3.4 will focus on how structure uses its power to make individuals (players) consume online games platforms. Section 3.5 – 3.7 will focus on how individuals resist or reconfirm the structure. The results are as follows:

3.1. Developer and Publisher Domination

The developer dominance variable strongly influences consumption behavior in virtual communities, but individuals do not realize this. This can be seen from the interviewee's statement:

Moonton is just a game service provider, and we are just players at best. We cannot do anything (Interview with Shokuzai Community, Q.3)

With Montoon, we are just players. That is all, so I am just a user (Interview with GPX Community, Q.4)

From the source's statement above, players do not seem to have any problems with the developer (in this case, Moonton games). However, the following statement provides another dimension of the relationship:

Moonton has a prestigious tournament called NPL. There are many requirements to enter the (NPL); the boss said the slot could be tens of billions (billions) rupiah. Because the NPL is exclusive, the NPL only contains eight teams, and so far, there have been ten seasons (Interview with GPX Community, Q.6)

The statement suggests that developer domination takes the form of rules that create exclusivity and social class divisions in online games. To achieve certain exclusivity, consumption is required both directly and indirectly (time and data purchases). This is clear evidence of developer dominance over online players.

Referring to the structuration theory, the modality of structure is to provide more facilities to players with a higher level of play. These facilities are in the form of convenience and exclusivity in the gaming ecosystem. In this case, the structure (developer) uses a power domination order where individuals are expected to be unable to do anything to challenge this domination apart from consuming virtual goods sold in online games.

The findings give new perspectives into existing research that there are other factors besides the rules of pricing. More specifically, the consumption in online games depends on the pricing strategy of the developers [8], and the domination of developers is a key to monetization in online games.

3.2. Community Legitimacy

Community legitimacy in virtual society is a condition where individuals seek justification through the community for consumption behavior that has been or will be carried out. Based on facts obtained through interviews, communities encourage consumption behavior by individuals. For example, they can create a group and help each other raise the game ranking. This can be observed in the interview excerpt:

If there is a new item in mobile legend, we can usually chat between communities; the most straightforward thing is we watch, analysts usually create content too, and we typically talk within the community and practice the game together (Interview with GPX Community, Q.12)

Of course, I will usually form a WA group to help members who want to push rank. Moreover, I also make rules because I aim to improve this community. (Interview with the Shokuzai Community Q.5).

Actions that occur in a community form trust between individuals, ultimately creating social cohesion. This trust and social cohesion eliminate individual verification when consuming online games. Social classification is not only carried out by developers but also by the community. Playing events can only be done by community members with the same social classification.

Communities also create norms for the members as indicated by the following statement:

The community must be a hub for a career. So, what should the community provide? It should open opportunities to enter big competitions, such as a promoter for e-sports athletes. (Interview with Golkar E-sport, Q4)

The community also helps to provide tips and tricks for success in a game so that there is a mutually reinforcing factor within the community. These mutually reinforcing factors cause the community to have a radical fanbase due to solid social cohesion, where the flow of information is received without any verification from individuals in a community. Hence, community verification is similar to individual verification.

The findings show that individual verification was eliminated by community verification prior to consumption. The uses of virtual items and visual graphics are only some of the primary considerations for online game players to consume in online game platforms. These findings do not contradict existing research where visual graphics and game stories are crucial to consumption [8]. However, community legitimacy is a determining variable that plays a significant role in the consumption of online games. The finding aligns with [16], who mentioned that online games have changed from solitary individuals to inherent social.

3.3. Player Exploitation

Based on the results of interviews, it was found that players recognized the game as a skill to win, rather than pay to win. According to sources, there is no need to buy virtual goods as player can advance to the next stage.

In order to use skill to win online games, the exploitation of players needs to be made apparent. However, it was also discovered that players can buy skins (such as accessories for avatars); these skins determine the quality of the graphics experienced by players. Apart from that, it was also discovered that this skin could improve the game. This can be observed in the interview excerpt:

Mobile legend is the game skills to win, not pay to win. We just bought the skin. Skin is like a costume. The costume has little impact; it just adds a minor ability. Just make it stylish. It is not pay to win (Interview with Shokuzai Community, Q.7)

The skill to win online games is also exploited through jockey services in the community.

This is done by players who cannot control their desire to advance to a stage even though their playing ability is insufficient. Hence, there is evidence that there is hidden player exploitation in online games.

The finding is in line with previous research, which mentioned that both premium (pay to win) and freemium (skill to win) converge in monetization practices [8].

3.4. Inter-Community Competition

Apart from the community legitimacy variable, which drives the consumption behavior of its members, one of the external factors is competition between communities. Based on the facts obtained from interviews, it was found that the number of pro players in the community reflect the community's elite. This elite status has economic impact on the community in the form of ease of finding the sponsors to achieve a "premier league," which is only filled by the 12 best communities by the regulations made by the online game developer.

The exposure is too big, and you can make money, get sponsors, and get many views (YouTube). It is a prestigious tournament; more importantly, the state recognizes it. So, every year, there are world and Asian tournaments. So, the winner was sent to represent Indonesia in the Asian tournament. (Interview with GPX Community, Q.10).

Tournaments have been created by elitist developers to create competition between communities. For example, based on the community leader's confession, a registration fee of 12 billion rupiah is required to register for the tournament. This causes tiered exploitation from developers to individuals in the community.

This research finding supports the idea of social capital [17], whereas previous research has shown that bonding among players should be understood as a different kind of social environment (virtual society) [16]. This research also indicates that inter-community competition forms social capital and drives consumption among community players to win over and gain recognition.

3.5. Individual Power Behavior

The individual power variable intervenes against the tiered exploitation by developers, and communities against individuals in online games. Based on the interview, it was discovered that one of the individual's powerful behaviors was to stop playing online because he realized that his abilities would not be able to reach that of a pro player.

At this stage, individuals usually feel the impact of consumption behavior in online games on their real lives. Hence, individual power is a variable that intersects between an individual's virtual life and real life.

Apart from the power of individuals who can stop playing games because of their limited ability to play, another driving factor is the need to support their personal and family economy. This fact was found in interviews where the interviewee stated that life is not just a game. It was found that individual power behavior was a reaction to multi-level exploitative actions in a virtual society.

A higher rank means the opponent is more capable. Then, I realized life is not only for gaming. I need to work. (Interview with GPX community; Q21)

The finding contradicts existing research that argues that gaming addiction results in a disorder that the player does not have the individual power to stop [12]. Although each individual's ability is different, our finding in this context proved that individual power can balance the domination of developers and communities.

3.6. Individual Conscious Behavior

The individual awareness variable is intertwined with the individual power variable. Individual awareness variables are the last bastion facing multi-level exploitation in a virtual society. The fact obtained through interviews is that if this individual power behavior variable can withstand tiered exploitation, it is automatically driven by emerging individual awareness. The problem is when the individual is underage and has no conscious behavior. The multi-level exploitation of children's consumption behavior in online games tends to stop when accompanied by parents and protected by the state.

If I look at all aspects, there are good and evil, for example... there have been several times when small children used their school money because maybe they did not get enough attention from their parents and did not think again. And for those who make money and help their lives, there are also many jockeys; they can be content creators, or they can be pro players ... pro players are now paid the lowest minimum wage (Interview with GPX Community, Q.22)

The finding, in line with previous research, shows that gaming disorder for children has a severe impact in several aspects [18], [19], [12] including consumption addiction.

3.7. Motivation

Motivation in consumption behavior in online games is driven by external and internal stimulation. In interviews, it was found that consumption of online games based on external stimulation was to maintain existence in the community and support its existence towards other communities. This occurs due to high social cohesion between individuals in the community and a heightened sense of ownership, which spurs competition between communities.

I felt like I had to buy the skin because I deserved it... I made an effort. I'm happy even though it does not increase skills (Interview with Golkar E-Sport, Q11)

According to the source, the internal stimulation is the level of visual graphics in online games. Online games are consumed to get a graphic visual experience that represent the level of play in online games as well as show individual status in a virtual society.

Our findings suggest that external factors such as individual existence in the community and community existence toward other communities are the main drivers of consumption. This contradicts extant studies, which argued that rational motives (internal factors) have been the primary cause of purchase decisions rather than emotional motives (external factors) [11].

4. Discussion

Based on the research findings, it was found that in the structural dimension, there is pressure to consume online games. The pressure comes from developers and the online gaming community. Social interaction between online players is limited by classification or class in online games, which, in the context of virtual society, reflects the social level of players. Higher rank players mean higher social capital. It is in line with the concept of social capital by Putnam (2001). This makes online players need to consume online game platforms to move from one social level to the next. Players cannot reject the classification or social level from the developer because players must agree to the EULA (End User License Agreement) before accessing online games.

Research findings give a new perspective to explain consumption in online games, where the current approach is more focused on virtual microeconomics, as defined by Lehdonvirta (2014) and Lehtineimi (2008).

Consumption behavior is also driven by online player communities, where each player needs legitimacy from the community. This need for legitimacy makes the community as the deciding factor in making purchases on online platforms. The role of the community is to eliminate the individual verification process in the consumption behavior of online players. This is done by key opinion leaders in the community.

Competition between communities also creates pressure to consume online games. This is because online players feel pride and fanaticism in the community. A large community will make getting sponsors and other economic benefits easier.

So, it can be concluded that the virtual world is a new reality for online communities and players.

Monetization in online games is usually carried out by purchasing virtual goods to increase online games' usefulness, social level, and hedonism. However, in the Indonesian context, other driving factors are found outside of online games: engagement—powerful social interaction between online players in internal communities and competition between communities. This finding supports the research by Krassen (2021) that mentioned online gaming transforms from a solitary individual into a new social environment.

Since the inductive approach (grounded theory) was used in this research, the findings have formed a new framework for understanding consumption behaviors in virtual society. The framework explains duality as follows:

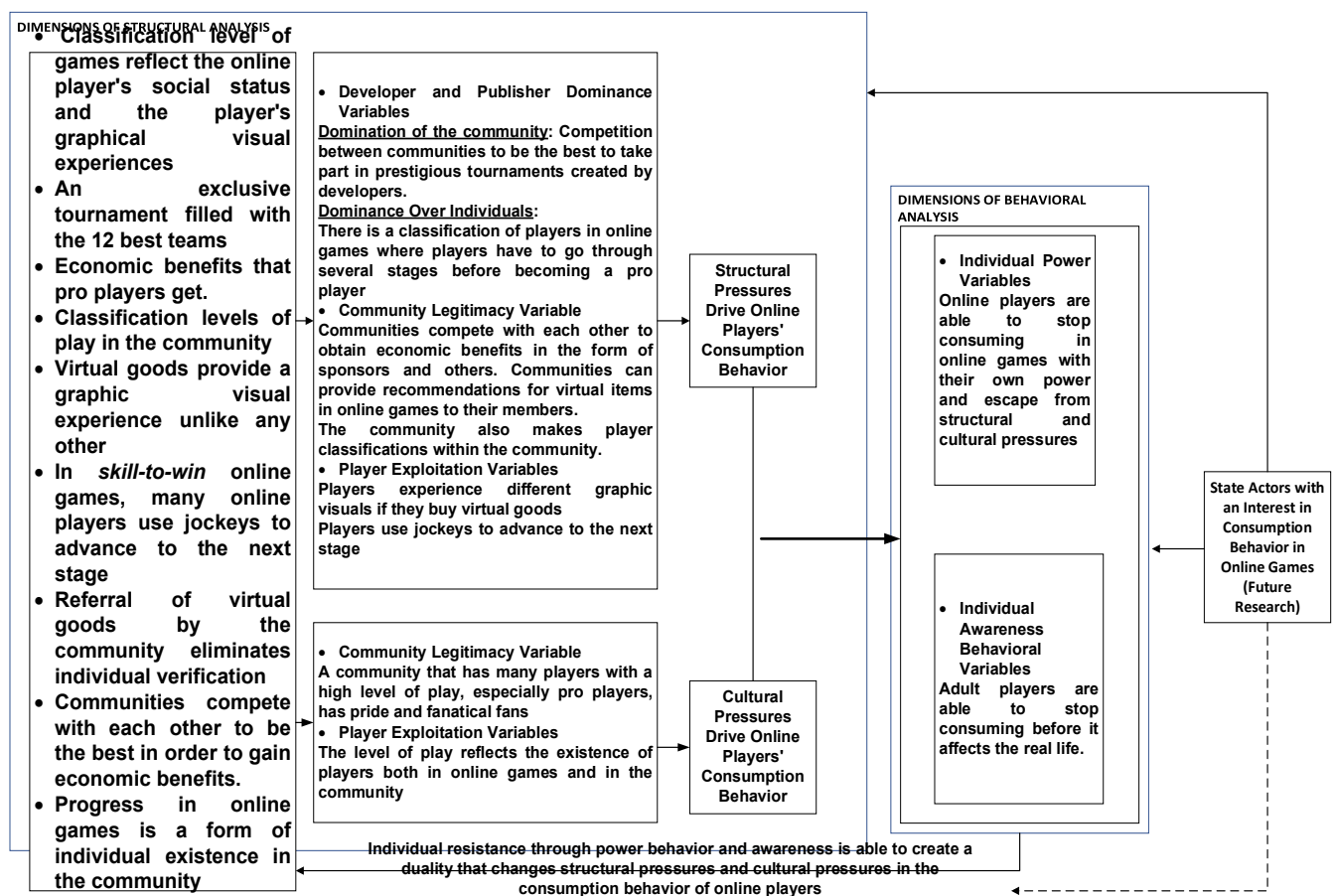


Figure 3. Proposed structuration framework for consumption behaviour in online games

The structural dimensions in the social environment put pressure on the structural and cultural exploitation of online players and the communities for consumption. However, there is a duality in the virtual society where individuals resist and reformat against structural pressures exerted by developers and online player communities.

Based on the research results, it was found that individuals will stop consuming online games based on power and self-awareness. This causes a social balance between development, community, and individual (online players), and duality happens in the structure of deep virtual society matter behavior consumption in online games. However, it was also found that resistance and reconfirmation were not found in underage online players.

5. Conclusion

Based on the findings, the consumption of online games is dominantly influenced by the domination of developers and communities. Online games have become a new social environment, a virtual society. It needs to use a multi-discipline approach. Most of the existing research focused on an economic approach (homo economicus perspective) where consumption relies on virtual items, visual graphics, and monetization strategy. This research indicates that consumption in online games platform as homo socio-interneticus prespective.

The novelty of this research is not to negate or revise the economic approach, but to offer a new paradigm to explain consumption as a result of the social system. The interaction between social elements creates duality where structural and cultural pressure has resistance from an individual in the form of power and self-consciousness.

This research offers a new framework for understanding consumption in virtual society. The framework can be used to understand and intervene in the system through a public policy.

The summary main finding and the research position compare to current research is shown in the Table 2 below:

Table 2. Summary of the research findings and the position with current research

Variable	Research Findings	Current Research	Contribution
Developer Dominance	Developer domination takes the form of rules that are made to create exclusivity and social class divisions in a virtual society.	Consumption of online games depends on the pricing strategy of the developers [1]	Adding new perspective
Community Legitimacy	individual verification prior to consumption was eliminated by community verification. The use of virtual items and visual graphics is not the primary consideration.	Do not contradict existing research where visual graphics and game stories are crucial to consumption [8]; however, community legitimacy is a determining variable that plays a significant role in the consumption of online games. The finding aligns with Krassen (2021)	Adding verification for Krassen (2021)
Player Exploitation	For players who cannot control their desire to advance to a stage, it can be concluded that player exploitation in online games is hidden.	Both premium (pay to win) and freemium (skill to win) converge in monetization practices. [8]	In line with Svelch (2021)
Inter-Community Competition.	Creating competition between communities causes tiered exploitation from developers to individuals in the community.	Shows that bonding among players should be understood as a different kind of social environment (virtual society) [16]	In line with Krassen (2021)
Individual Power Behavior	Individuals can stop playing games because they cannot play and need to support their personal real life and family economy.	Existing research shows that gaming addiction results in a disorder that the player does not have individual power to stop [12]	Contradicting current research.
Individual Conscious Behaviors	Individual power behavior variables can withstand tiered exploitation; it is automatically driven by emerging individual awareness, except the individual is still underage.	Gaming disorders for children have a severe impact in several aspects [18], [19],[12], including consumption resistance.	In line with current research
Motivation	Consumption of online games based on external stimulation was to maintain existence in the community and support the community's existence towards other communities.	Current studies show that the rational motive (internal factors) has been the primary cause for purchase decision, not the emotional motive (external factors) [11]	Contradicting with current research

The above result is based on a socio-interneticus approach where the social system influences the individual in online space. Research implication to the developer: The finding can be used as a reference for monetization strategy using a cultural approach. Meanwhile, for regulators, the framework can be used as a reference to create policy regarding microtransactions in online games. For individuals and communities, it is crucial to understand developer strategy and limit unnecessary online games consumption. Suggestions for future research are to find the role of actors interested in virtual communities' social environment, namely the government.

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