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PLAYING THE GAME: VIDEO GAMES AND VIDEO GAME STREAMING PLATFORMS AS MARKETING COMMUNICATION CHANNELS

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To the Graduate Council:

I am submitting herewith a dissertation written by Roman Welden entitled "PLAYING THE GAME: VIDEO GAMES AND VIDEO GAME STREAMING PLATFORMS AS MARKETING COMMUNICATION CHANNELS." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Business Administration.

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PLAYING THE GAME: VIDEO GAMES AND VIDEO GAME STREAMING PLATFORMS AS MARKETING COMMUNICATION CHANNELS

A Dissertation Presented for the
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Abstract

While video games are generally viewed as a form of entertainment for a small subset of people, in reality they provide a channel for nearly 3.2 billion people to interact with others and offer multiple pathways for marketers to interact with consumers. Pair this alongside 140 million unique consumers who consumer nearly 24 billion hours of content on video game streaming platforms (VGSPs), such as Twitch, and there is a deep need for marketers to understand how to engage consumers in these environments. This dissertation provides a conceptualization of the video game ecosystem as well as the types of influencers on VGSPs, while highlighting important marketer-to-consumer interactions that occur through these platforms.

In the first essay, I provide a new framework called the video game ecosystem to show how video games can be leveraged as a marketing communication channel and how it differs from other popular channels, such as social media and television. Furthermore, I identify 7 testable propositions from the marketer's perspective I believe will meaningfully direct the current marketing practice while shaping marketing research's future including outlining the ways marketers should build and present content through this channel, highlighting marketer-consumer interactions unique to this ecosystem, and showcasing the potential ways firms can leverage the video game ecosystem in their marketing strategies. Finally, in this essay I present 12 future research areas to help kickstart marketing research in this domain.

In the second essay, I present a new conceptualization of influencer marketing through VGSPs. Specifically, I highlight how influencer-to-influencer (I2I), influencer-to-consumer (I2C), and consumer-to-consumer (C2C) relationships differ on VGSPs compared to traditional social media platforms, and how these relationships impact consumers downstream. I identify two unique types of influencers on VGSPs (video game streamers and esports athletes) and provide 6 novel propositions regarding the formation of social networks around these

influencers. Finally, I provide 8 research areas to help shape the future of consumer research across multiple domains.

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INTRODUCTION

While social media has dominated much of the discussion of digital marketing over the last decade, video games have been quietly growing in terms of both their global use by consumers and their capabilities as a vehicle for marketing to the point of becoming a significant factor in firms' marketing strategies. In 2021, the cost of presenting marketing content through video games was estimated to be over $6 billion; such expenditures are growing at a rate of 16% per year (Statista 2022). Worldwide, more than three billion people play video games for an average of six to seven hours per week (Newzoo 2022). In the United States alone, nearly 50% of the population (with most under age 40) admit to regularly playing video games (Pew Research Center 2017). Despite such high levels of consumer participation, marketers have largely ignored the role video games play in many people's lives. Participation in video games worldwide is roughly 75% the size of social media participation (3.2 billion users vs. 4.5 billion users, respectively [Statista 2022]). Nevertheless, marketers spend nearly 30 times less on advertising and promotions through video game channels than through social media channels - despite the fact that video games have many of the same data advantages found on social media, such as the ability to provide targeted advertising and advanced situational analytics.

Video games—through their unique structure—create channels of communication between consumers and firms that can provide firms more situational control of marketing content than other communication forms. However, even though video games are valuable to marketers and likely to continue growing in their potential given current usage trends, little research has been done to understand the fundamentals of these communication channels or to identify which strategies are most effective for marketers. The limited research that has been done in marketing has used video games merely as a context to test established ideas such as

two-sided markets (Landsman and Stremersch 2011), price bundling (Derdenger and Kumar 2013), launch publicity (Burmester et al. 2015), digital word of mouth (Marchand, Hennig-Thurau, and Wiertz 2017), and policy implications for violent video games (Anders 1999; Collier, Lidder Jr., and Liddell 2008). I found only two articles in top marketing journals examining video games as an immersive phenomenon that presents new communication opportunities between firms and consumers (Jeong, Bohil, and Biocca 2011; Yang et al. 2006). However, these articles consider video games merely as a context in which to place products within the game itself and not as an interactive ecosystem in which information can be used to more effectively and dynamically target content for consumers.

The dearth of marketing literature on video games suggests a need for both conceptualization of the ecosystems created by video games as well as empirical research to enrich the understandings of what is possible for marketers through video games as a marketing communication channel. This dissertation, through two essays, examines each of the parties involved with the interconnected ecosystem created by video games, creates a conceptualization of the consumer experience throughout the ecosystem, outlines fundamental relationships in the form of propositions, and takes a focused look at the impact of marketing content that is deeply integrated into the gaming experience to understand some of the opportunities that are created when video games are used for marketing communications.

In the first essay, I focus on creating a conceptualization of video games and the surrounding ecosystem that is involved in the communication process between firms and consumers and address the following research questions: (1) How do video games and the gaming industry's surrounding structures function to form a communication channel for consumer and marketer interactions? (2) How does the experiential nature of video games enable

this channel to function differently from other marketing channels, such as social media or television? (3) What should marketers do to leverage this channel's unique capabilities to maximize their investments?

I begin by building on existing literature from a multitude of fields to form a definition that describes what makes a video game that can be used as a communication channel from a marketing perspective. From here, I present a conceptualization of the video game communication ecosystem, which highlights the exchange of information between firms who want to present content through the channel and consumers who play video games and how this information is mediated by the companies who produce and maintain the games as well as by a special type of influencer that engages consumers by live streaming themselves playing video games. Along with this, I utilize the experiential nature of the video game ecosystem to apply flow (Csikszentmihalyi 1977; Hoffman and Novak 1996) and feelings-as-information theory (Schwarz 1990) to map out the consumer in-game experience which predicts the cognitive, affective, and informational processing levels on a moment-by-moment basis based on what the consumer is experiences during the game. Next, I outline 7 research propositions which describe fundamental relationships that occur from the interactions within the video game ecosystem. Finally, I provide a set of 12 research directions to drive future marketing research.

In the second essay, I look to dive deeper into one of the research propositions presented in the first essay, which suggests that the characteristics surrounding video game streamers in the video game ecosystem create opportunities for marketer to consumer communications that are not available through influencer marketing on traditional social media platforms. Thus, I seek to address the following research questions: (1) What are the different types of influencer marketing that occur within the video game ecosystem? (2) How do these types of digital

influencers differ from those on traditional social media platforms? (3) How do social networks form from influencer-to-influencer, influencer-to-consumer, and consumer-to-consumer through video game streaming platforms compared to traditional social media platforms?

To address these research questions, I present a conceptualization of two types of digital influencers that exist on video game streaming platforms: video game streamers and esports athletes. From here I highlight how these two types of digital influencers differ from those on traditional social media platforms. I then present 6 propositions that outline how social networks form around these influencers from three perspectives: influencer-to-influencer (I2I), influencer-to-consumer (I2C), and consumer-to-consumer (C2C) relationships. These social network structures combine to impact the way social influence is exerted onto consumers. Finally, I present 8 research directions to drive marketing research in these new domains.

CHAPER 1: ESSAY 1

GETTING IN THE GAME: THE VIDEO GAME ECOSYSTEM AS A DYNAMIC MARKETING COMMUNICATION CHANNEL

Abstract

While video games are generally viewed as a form of entertainment for a small subset of people, in reality they provide a channel for nearly 3.2 billion people to interact with others and offer multiple paths for marketers to interact with consumers. The authors provide a definition of video games that aligns with the marketing perspective and present a conceptualization of an interconnected ecosystem which includes all parties involved with marketing through video games. Alongside this, the authors show how this video game ecosystem differs from other popular marketing channels. Furthermore, the authors identify 7 propositions from the marketer's perspective they believe will meaningfully direct the current marketing practice while shaping marketing research's future in multiple ways including outlining the ways marketers should build and present content through this channel, highlighting marketer-consumer interactions unique to the video game ecosystem, and showcasing the potential ways firms can leverage the video game ecosystem in their marketing strategies. Finally, the authors present 12 future research directions and provide recommendations for current marketing practices.

Keywords: marketing channel, video games, digital marketing, influencer marketing

INTRODUCTION

While social media has dominated much of the discussion of digital marketing over the last decade, video games have been quietly growing in terms of their global use by consumers and their capabilities as marketing channels. Today, video games are also becoming a significant factor in firms' marketing strategies. Worldwide, 3.2 billion people play video games for an average of six to seven hours per week (Statista 2021; Newzoo 2021). Over 60% of the population regularly plays video games in the United States alone (Statista 2021), and participation in video games worldwide is roughly 71% the size of social media participation (3.2 billion users vs. 4.5 billion users, respectively) (Statista 2021). In 2020, the global in-game advertising market was valued at nearly $5.3 billion, growing at a rate of 19.5% per year (IPSNews 2021).

Despite such high levels of consumer participation, however, marketers are still not fully acknowledging video games' importance in many people's lives. Firms spend nearly eight times less on marketing content through video game channels compared to social media channels (Statista 2021), particularly surprising because video games offer marketers many advantages over social media. Specifically, through their unique ecosystem structure, video games create marketing channels that provide firms with more situational control of marketing content than other marketing platforms. That is, within the video game ecosystem, content can be adjusted based on a player's success and failure or relevant video game situations (e.g., high-intensity plot points, reaching redefined game objectives) on a consumer-by-consumer and moment-by-moment basis. Many popular video games use information regarding consumers' immediate experiences (e.g., current cognitive and affective states) and information gathered over longer periods (e.g., demographics and behavioral patterns learned over multiple gaming sessions) to customize marketing content presented during and between game sessions.

Mirroring this lack of adoption of video games as a communication channel, only limited research has been done to understand the video game ecosystem's fundamentals or to investigate which strategies are most effective for marketers. Prior marketing literature has primarily featured video games as a context in which to test established ideas. Examples include two-sided markets (Landsman and Stremersch 2011), price bundling (Derdenger and Kumar 2013), launch publicity (Burmester et al. 2015), digital word of mouth (Marchand, Hennig-Thurau, and Wiertz 2017), digital free samples (Li, Jain, and Kannan 2019), and policy implications (Anders 1999). We found only two articles conceptualizing video games as an immersive phenomenon that presents new marketing opportunities between firms and consumers (Jeong, Bohil, and Biocca 2011; Yang et al. 2006). However, both of these articles consider video games as merely a context in which to place products and not as an interactive ecosystem in which information can be used to target content for consumers more effectively and dynamically.

We aim in this paper to contribute to this literature and to improve understanding of video games' capabilities as a dynamic marketing channel by answering the following questions: (a) How do video games and the gaming industry's surrounding structures function together as an ecosystem to form a marketing channel for integrating marketing content? (b) How does video games' experiential nature enable this ecosystem to function differently from other marketing channels, such as social media or television? (c) What should marketers do to leverage this channel's unique capabilities to maximize their return on investment?

VIDEO GAMES AS DYNAMIC MARKETING CHANNELS

Before discussing how marketers interact with consumers in the video game ecosystem, we define video games and discuss conditions under which they should be considered for use as a dynamic marketing channel.

Video games have two defining characteristics. First, they are designed to generate an *interactive experience solely for play* (Esposito 2005; Tavinor 2008; Zimmerman 2004). We refer to the term *solely for play* as distinct from goal-oriented activities, such as purchasing, information seeking, or communication with others. Most players play video games as interactive entertainment allowing them to escape their reality (Esposito 2005; Klimmt and Hartmann 2005; Tavinor 2008; Vorderer et al. 2006). Creating environments that allow for play, games provide a *clear set of rules and goals* for players, enabling interactions that tend to be different from players' reality (Caillois and Halperin 1955; Suits 1967; Esposito 2005). Second, compared to other types of games, such as traditional board games, video games rely on an *audiovisual/digital interface*, enabling the generation of an interactive environment shaped by automation, complexity, and immersion (Esposito 2005; Tavinor 2008). Audiovisual/digital interfaces are critical for facilitating the experience solely for play; they distinguish video games from their non-electronic predecessors (e.g., board games and card games) and early forms of electronic games (e.g., *Simon Memory Game* or *Tetris* console game). Prior research has found that audiovisual interfaces lead to deep immersion, generating a consciousness that is different from ordinary life (Glicksohn and Berkovich-Ohana 2012; Zimmerman 2004). As a result of the *digitally immersive experience* created by video games, players experience psychological and/or aesthetic distance from their reality (Glicksohn and Berkovich-Ohana 2012), deepening the game's experiential dimension.

Importantly, a game can possess all of the video game's characteristics but may not allow for certain forms of communication from marketers to consumers. To serve as a dynamic marketing channel, a video game must possess two additional characteristics. First, the video game must provide *continuous online integration,* allowing real-time marketing content to be presented to mass audiences. As innovations in video games have occurred over the past few decades,

developers have increasingly incorporated Internet connectivity into the video game experience. For example, most cross-platform games—such as *Fortnite* (a defense-shooter game released by Epic Games in 2017) and the *Call of Duty* series (a first-person shooter game series launched by Activision in 2003)—use online capabilities to create massive multiplayer online games (MMOG) with players located across the globe. Also, most mobile games, such as *Candy Crush*, encourage players to use their Internet connection to create leaderboards, which can deepen the video game experience by making players' competitive positions salient. The second characteristic is the ability to *track player behaviors*. Information gleaned from tracking a player's behavior, used to predict subsequent behavior (usually obtained through artificial intelligence [AI] or machine learning), can also be used by marketers and game designers both to deepen the player experience and to adapt and interject content dynamically, moment-by-moment, at opportune times (Labbe 2019; Vasilyeva 2020). We, therefore, provide the following definition of a video game):

> A *video game* is an interactive experience solely for play that relies on an audiovisual/ digital interface to generate a digitally immersive experience with a clear set of rules and goals. Video games can be used as dynamic marketing channels if they provide continuous online integration and allow players' behaviors to be tracked.[1]

THE VIDEO GAME ECOSYSTEM

Video game companies (VGCs) (e.g., Activision Blizzard or Epic Games), streaming services (e.g., Twitch and YouTube Gaming), marketers, and consumers create a symbiotic ecosystem of information transfer, where video games act as the central medium connecting the parties. To better understand this video game ecosystem, we draw on the notion of the "business ecosystem," conceptualized by Moore (1996) as an "economic community supported by a foundation of interacting organizations and individuals—the organisms of the business world" (p. 133).

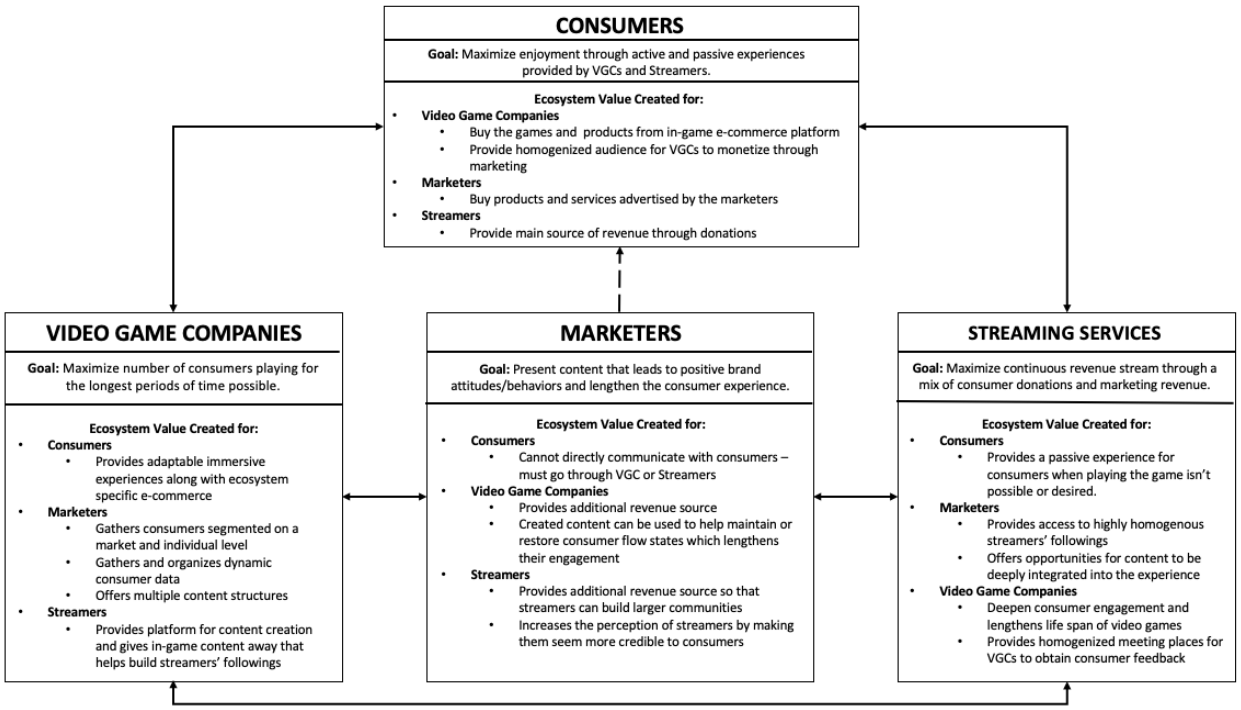
[1] See Web Appendix A for further information regarding the types of video games and how they can be used as marketing channels.

Ecosystems' primary functions include (a) connectivity, interdependence, and resource sharing among actors that enable the creation of value for other ecosystem actors (Shipilov and Gawer 2020); (b) co-evolution of actors as they develop or transfer resources or practices across the ecosystem (Cantwell et al. 2010); (c) creation of greater value than any one actor or subset of actors can produce as a result of their combined capabilities and resources (Googin and Rochins 2000); and (d) lack of centralized, hierarchical control such that actors coordinate their own activities via formal and/or informal relationships (Jacobides et al. 2018; Petit and Teece 2020).

There can be various forms of engagement among ecosystem actors, ranging from aligning with standards (e.g., the need to co-evolve as technology advances) to more formal interaction based on interdependencies with contractual arrangements (e.g., between VGCs and marketers). In addition, the nature and structure of actors' relationships can evolve over time. Table 1 provides exemplary characteristics of a video game's communication ecosystem to illustrate these features.

A key consideration in our context is the flow of information among an ecosystem's actors. An ecosystem's actors can be connected through a shared platform (e.g., a shared technology) enabling interactions among ecosystem actors to create value (e.g., Sridhar, Mantrala, Naik, and Thorson 2011). In our example, the shared platform is the video game all ecosystem actors rely on for value creation. Network externalities play an essential role in the evolution of ecosystems that include platforms (Parker, Van Alstyne, and Choudary 2016). Such network externalities also play an important role in the video game context. For example, as watching streamers play video games on digital channels, such as Twitch, increases in popularity, marketers may reap greater benefits from their partnerships with streamers because their communications will reach a wider audience.

Figure 1 depicts the video game ecosystem and highlights the multiple routes through



Note: Although esports (i.e., electronic sports) is an important phenomenon with marketing potential, we do not include it in our conceptualization of the video game ecosystem. Instead, esports is examined further in the discussion section.

Figure 1: The Video Game Ecosystem

Table 1: Key Characteristics of the Video Game Ecosystem

Ecosystem Feature	Examples in the Video Game Ecosystem
Connectivity, interdependence, and resource sharing among actors that enable value creation for other ecosystem actors	• VGCs and marketers are interdependent in their reliance on consumer insights to drive demand for their offerings. • Streamers rely on VGCs to maintain stable gaming products to keep producing content. • Streamers and smaller VGCs rely on marketers to provide a high percentage of their revenue stream. • Knowledge regarding consumer behaviors is shared between VGCs and marketers and between streamers and VGCs. This knowledge allows for enhancing game designs, leads to more significant game usage, provides more opportunities for video game marketing communication exposure, and increases traffic to streaming services such as Twitch.
Co-evolution of actors as they develop or transfer resources or practices across the ecosystem	• The rise of streaming services leads VGCs to add features in their products, thus accommodating content creation (e.g., VGCs adding options to remove copyrighted audio for streaming purposes, increased screen capture options). • New monetization structures (e.g., free-to-play, freemium) allow consumers easier access to games, which in turn provides streamers easier access to consumers for content generation while putting stronger emphasis on the potential revenue provided by marketers.
Creation of greater value than any one actor or subset of actors can produce as a result of their combined capabilities and resources	• Marketers provide curated content that benefits VGCs by helping maintain and restore consumer flow states, in turn increasing engagement. • Marketers provide additional revenue for streamers and VGCs, which allows them to extend the life cycles of their content and products. • Streamers and VGCs provide two avenues through which marketers can communicate with consumers, increasing the options for marketers to customize content in order to reach consumers. • Streamers build homogenized consumer followings, facilitating market segmentation and providing VGCs easier access to consumer feedback.
Lack of centralized, hierarchical control such that actors coordinate their own activities via formal and/or informal relationships	• VGCs give streamers free in-game content to distribute to consumers in order to drive deeper game and stream engagement. • Streamers leverage their followings to gather and share consumer insights with VGCs. • Marketers provide a portfolio of marketing content for VGCs to disperse at opportune times. • Marketers coordinate with streamers to integrate marketing content into the streaming experience. • Relationships can move from informal to formal over time as levels of value creation increase (e.g., Streamers indirectly interact with VGCs at first; but as they build a larger following, VGCs may formally provide streamers support in order to leverage synergies.)

which information can flow. As noted, each ecosystem actor coordinates its own activities via either formal and/or informal relationships with other actor. Thus, while we depict the marketer at the ecosystem's center based on our focus on video games as a marketing channel, we are not implying that marketers hierarchically control all other actors. We next discuss the role of video game companies, streaming services, and marketers in this ecosystem in enabling or facilitating video games' use as dynamic marketing channels. Consumers and their video game experiences are also discussed in greater detail.

Video Game Companies (VGCs) as Marketing Intermediaries

VGCs fulfill two key functions within the video game ecosystem. First, they receive and analyze consumer information collected during the video game experience. As players engage with a game, they continually provide real-time data (e.g., emotional states, play patterns, communication patterns with other players, preferred play times) and demographic information (e.g., age, location, gender) to the VGCs (Drachen 2017; Mitchell 2018). VGCs decode this information to generate player profiles, which are used to predict future players' behaviors within the video game—leading to the second feature, VGCs' leveraging these profiles to ensure that marketing content is presented to a targeted consumer at the optimal time while not interfering with, and ideally even enhancing, the video game experience (deltaDNA 2018; Digital Intelligence 2019). VGCs segment consumers on a market level (i.e., similar consumers playing the same game) and at an individual level, resulting in consumer profiles that VGCs can use to provide marketers with suggestions regarding which type of content is most effective when presented during particular gaming experiences. In this sense, VGCs control the flow of all information through the video game experience.

In addition, VGCs provide other contributions to the video game ecosystem. For example, VGCs continuously update their video games to give streamers new content with which they can

engage and provide consumers with a constantly changing digital experience. VGCs also create value for the video game ecosystem by providing an ecosystem-specific e-commerce platform that benefits consumers and marketers. For consumers, these e-commerce capabilities provide the opportunity to purchase additional in-game content (e.g., cosmetic skins or other gameplay options) to further deepen their video game experience. Marketers can use such platforms to sell digital goods (e.g., branded cosmetic items) to customers, providing additional ways for marketers to engage with the video game ecosystem.

Streaming Services as Drivers of Engagement and Mediators of Social Influence

Streaming services allow consumers to watch individuals play video games. Consumers can follow users who record themselves live while playing video games and simultaneously converse with other viewers via an online chat function. The most popular streaming service is Twitch (InfluencerMarketingHub 2018). Launched in 2011 and currently a subsidiary of Amazon, Twitch has roughly 120 million unique monthly viewers, including over 50% of all millennial males in the United States (Github 2018). Nearly 9 million unique content creators are active on Twitch, and they are watched more than 1.1 trillion minutes a year (Business of Apps 2022). The average Twitch user spends 106 minutes per day on Twitch (Github 2018; InfluencerMarketingHub 2018). Twitch generates the fourth-highest Internet traffic level in the United States, ahead of tech giants—such as Hulu; Facebook; and even Twitch's parent company, Amazon (Github 2018).

Within the video game ecosystem, streaming services play two roles. First, they allow VGCs to deepen player engagement. For example, VGCs can organize "drops" (i.e., free in-game resources obtained by interacting with a sponsored stream) in which VGCs partner with streaming services to provide rewards to players as they pass milestones in the amount of viewed content (Johnson and Woodcock 2019; Twitch.tv 2020). For example, *Call of Duty: Warzone*, one of the

most-played video games, provides players with new in-game outfits and gun customizations for each hour they watch any of a list of sponsored streamers in a week (Activision 2020).

Second, streaming services provide VGCs the ability to communicate with consumers through influencers or popular players. One way to do so is to financially sponsor popular influencers who have gained status playing a game on Twitch. By sponsoring such influencers, VGCs can expose new players to their games; create new video game experiences for players; and most importantly, retain players by creating a watch/play loop in which an influencer encourages players watching them play a game on a streaming service to continually return to playing their video game themselves (Twitch.tv 2019).

Marketers as Producers of Experience-enhancing Content

Like traditional marketing channels (e.g., television, social media), marketers cannot directly interact with consumers within the video game ecosystem but instead present their content through information mediators. Marketing content can either be part of the in-game experience, controlled by VGCs, or the in-stream experience, controlled by streaming services and streamers. While content mediators also exist in other marketing channels (e.g., television networks, social media companies), a key difference in the video game ecosystem is how content mediation impacts the revenue generated by other video game ecosystem actors. For most other marketing channels, revenue from marketing content makes up most, if not all, of the channel's revenue. In contrast, marketers play only a supplemental role in revenue generation for most VGCs, streaming services, and streamers. The goal of these video game ecosystem actors is to build a digitally immersive experience in order to increase consumer engagement and, ultimately, financial commitment. For VGCs, revenue is generated by selling games or marketers' placing content in the game. For streamers, revenue is provided through consumer donations in the form of subscriptions to the

streamer's channel in order to obtain additional privileges during interactive streaming experiences. VGCs and streamers may be wary of including marketing content in the consumer experience[2] because it could negatively impact their primary source of revenue. Therefore, marketers should aim to generate content that not only creates favorable marketing responses (e.g., brand perceptions, behavioral responses) but also either enhances or at least does not harm the consumer video game experience.

A notable exception to the need for marketer content in order to enhance the consumer video game experience is a category of mobile games whose business model is based on obtaining most, if not all, of their revenue from marketers. These games leverage a free video game experience to build consumer following, which is subsequently monetized through marketing content. However, even those firms must be conscious of incorporating marketing content to avoid detracting from the video game experience if they want to retain consumers for extended periods. The focusing on building and maintaining a consistently enjoyable consumer video game experience for VGCs and streamers requires marketers to create content consistent with the video game experience and to present it to consumers at opportune times such that all parties benefit and so as not to detract from the video game experience.

Differences in the Video Game Ecosystem and Other Marketing Channels

The need to produce experience-enhancing marketing content is not the only difference between the video game ecosystem and other marketing channels, such as television, traditional social

[2] While our analysis focuses on the marketer's perspective, the customer experience within the video game is a topic that deserves deeper analysis. Our manuscript uses the terms *customer experience*, *in-game experience*, and *player experience* interchangeably. We also acknowledge that the definition of *gaming customers* can include players; spectators; and, to some extent, streamers. See Lemon and Verhoef (2016), Siebert et al. (2020), and Bleier et al. (2019) for more details on the broader customer experience concept.

media, influencer marketing, and e-commerce. We summarize additional differences in Table 2 and discuss them below.

Marketing research capabilities. A significant advantage of the video game ecosystem over other marketing channels is its ability to gather more granular consumer profiles. Like social media and e-commerce, video games capture behavioral data in real time. However, unlike other channels, VGCs can observe and characterize individual consumer video game experiences dynamically as they occur. Combined with demographics and other known information, these experience data enable VGCs build highly accurate consumer profiles, including real-time emotional states and cognitive processing methods. Compared to other marketing channels, we argue that the research capabilities of the video game ecosystem are rivaled only by social media.

Marketing segmentation capabilities. Marketing channels typically segment consumers either on a market or consumer level. For example, television and influencer marketing bring groups of homogenous consumers together in one place, facilitating high-level segmentation based on market similarities. Social media and e-commerce platforms leverage customized consumer experiences to present marketing content segmented at the individual consumer level. Advantages of the video game ecosystem are that (a) it simultaneously provides market and consumer-level segmentation as groups of homogenous consumers form segments around specific types of games and (b) information regarding customized consumer video game experiences can be gathered.

Marketing segmentation capabilities. Marketing channels typically segment consumers either on a market or consumer level. For example, television and influencer marketing bring groups of homogenous consumers together in one place, facilitating high-level segmentation based on market similarities. Social media and e-commerce platforms leverage customized consumer experiences to present marketing content segmented at the individual consumer level. Advantages

Table 2: Differences between the Video Game Ecosystem and other Marketing Channels

	Television	Social Media	Influencer Marketing	E-Commerce	Video Game Ecosystem
Marketing Research Capabilities					
Behavioral Tracking Capabilities	X	✓	X	✓	✓
Real-Time Cognitive Processing	X	✓	X	X	✓
Real-Time Emotional States	≈	≈	X	X	✓
Marketing Segmentation Capabilities					
Market Level Segmentation	✓	X	✓	X	✓
Consumer Level Segmentation	X	✓	X	✓	✓
Marketing Communication Capabilities					
Natural Breaks for Marketing Content	✓	X	X	X	✓
Ability for Passive Marketing Content	X	X	X	✓	✓
Potential for Content to Deepen Experience	X	X	X	X	✓
Product Access					
Direct Access to Advertised Product	X	✓	✓	✓	≈
Potential to Link Products to Experience	X	X	✓	X	✓
Content Distribution					
Highly Concentrated Content Distribution	X	✓	X	X	X
Content Distribution Standards	✓	✓	≈	✓	X

Note: X = Does not have the capability as a marketing channel
✓ = Has the capability as a marketing channel
≈ = Has the capability as a marketing channel but in a limited capacity

of the video game ecosystem are that (a) it simultaneously provides market and consumer-level segmentation as groups of homogenous consumers form segments around specific types of games and (b) information regarding customized consumer video game experiences can be gathered.

Marketing communication capabilities. The video game ecosystem stands out compared to other marketing channels based on how marketers can communicate their offering's value. As with television, one of the advantages of the video game ecosystem is the presence of natural breaks to present marketing content. For many types of games, as a game session ends, there is a need to load and/or find other players before the next session begins. Also, like e-commerce platforms, many games and streaming services allow marketing content to be passively integrated into the experience, whether through banner advertisements or in-game product placement. The unique marketing advantage for the video game ecosystem is the ability to present marketing content in such a way that leads consumers to engage with the experience more deeply. Because marketing content becomes part of the video game experience, consumers judge such content in the context of the surrounding game or streaming experience. If designed and presented correctly, marketing content in this ecosystem can elongate or enhance positive emotions derived from positive video game experiences or reduce the negative emotions obtained from negative game experiences. We further explain this phenomenon in the consumer experience and proposition sections.

Product access. While some mobile video games allow consumers to visit an advertised product's website, most video games do not because the VGCs do not want consumers to step away from their video game experience. However, much like influencer marketing, the video game ecosystem allows for the sale of game-specific digital products (e.g., cosmetic skins from the VGC and digital products designed by the marketer) to fit the video game experience.

Content distribution. A key disadvantage of the video game ecosystem compared to other marketing channels is its unstructured content distribution. As opposed to the more mature nature of the advertising industry as it leverages other marketing channels, such as social media or television, the video game ecosystem is nascent and evolving. With hundreds of video game companies and millions of streamers on Twitch alone, marketers face a significant challenge in identifying where to direct their resources in the video game ecosystem. To address this challenge, there appears to be efforts to consolidate within the video game industry. For example, Microsoft recently purchased Activision and owns one of the largest portfolios of IPs and gaming titles (e.g., Halo, Call of Duty, World of Warcraft) in the marketplace. Interestingly, Microsoft acknowledges its desire to leverage consumer data across its portfolio of games and other offerings to provide a deeper consumer video game experience (Microsoft 2022).

CONSUMER EXPERIENCE IN THE VIDEO GAME ECOSYSTEM

To understand the video game ecosystem as a marketing channel, it is important to understand how consumers process information and interact with their immediate environment during the video game experience. Video games function as digitally immersive experiences—i.e., experiences created through cues in the digital environment drive purposeful cognitive attention through actively engaging with the intent to fully immerse individuals into the experience instead of their current reality (Pine and Gilmore 1998).

By conceptualizing video games as digitally immersive experiences, we can leverage the theory of flow[3] (Csikszentimihaly 1977; Hoffman and Novak 1996) to understand how consumers interpret their interactions with the ecosystem. *Flow* is defined as "the holistic sensation that people

[3] We decided to focus on the theory of flow comparative to narrative transport. For reasoning regarding this decision, see Web Appendix B.

feel when they engage with an activity with total involvement" (Csikszentimihaly 1977). Flow is an ever-changing, dynamic system composed of an individual and their environment, which yields an enjoyable and immersive experience. It relies on *emergent motivation*, which states that any moment within a state of flow is determined and responsive to the most recent interaction of individuals with their environments and the proximal goals that arise out of those interactions. Thus, entering flow during a digital experience is a function of how attention has been focused in the recent past, the activity's structural conditions in the present, and the extent to which consumers feel present in the digitally mediated environment instead of their physical environment.

In marketing, flow has been used to understand digital experiences, such as web surfing and online shopping. In their seminal article, Hoffman and Novak (1996) first used the concept to show that websites benefit from facilitating flow experiences. Studies building on Hoffman and Novak's work have examined *flow's antecedents*—e.g., interactivity, involvement, and challenge (Choi, Kim, and Kim 2007; Hoffman and Novak 1996; Huang 2003; Novak, Hoffman, and Yung 2000; Skadberg and Kimmell 2004) and *consequences*—e.g., increased exploratory behavior and dramatic changes in emotion and attitude (Choi, Kim, and Kim 2007; Chou and Ting 2003; Hoffman and Novak 1996; Korzaan 2003; Huang 2006; Novak, Hoffman, and Yung 2000). We propose that flow states are critical in connecting consumers' video game experiences to the cognitive and affective responses of interest to marketers. Next, we discuss flow's potential downstream effects in a video game context.

Three conditions must be met for flow to occur: (a) equal balance between an individual's skill level and the challenge level presented by the environment, (b) complete absorption into the environment, and (c) continual establishment of clear goals (Csikszentmihalyi 1977; 1990). The video game ecosystem uses consumer data to change the in-game environment on an ongoing basis

in order to achieve a match or equal balance relative to an individual's skill level. In addition, digital challenges and goals are presented to encourage complete absorption. Therefore, the video game ecosystem continually creates flow for consumers through data-based adaptation.

Ensuring an appropriate challenge/skill balance is vital; and while many theoretical models have been created to understand this balance, the four-channel flow model best outlines the possible combinations of challenge and skill (Ellis, Voelkl, and Morris 1994; LeFevre 1988). This model suggests that flow states only occur when skill level and challenge are (a) matched and (b) present in large amounts. When these conditions are not met, other states occur, such as anxiety (when challenge exceeds skill level), boredom (when challenge is below skill level), and apathy (when both challenge and skill level are low). This balance is crucial to the video game ecosystem because consumers are more likely to disengage from an experience in the absence of flow.

One of the many ways multiplayer video games incorporate this balance is skill-based matchmaking, the technique of filling multiplayer game lobbies with similarly skilled players to ensure a balanced experience for all participants while continually challenging players to improve their video game-related skills. Although some players (particularly highly skilled ones) have disapproved of this process and have challenged the assumption that players always want to play in a highly contested game, evidence has shown that video games with skill-based matchmaking tend to have higher player-retention rates (Den of Geek 2020)

Marketers can leverage such understanding of creating and breaking flow states to determine how consumers immersed in a video game make decisions to remain engaged with the video game, process information presented to them during the experience, and attribute emotions experienced during such engagement. As consumers continue engaging with the video game, each

action impacts the future utility they receive from the subsequent immediate use of the game. Figure 2 illustrates these processes.

By referring to literature on product usage and flow (Holbrook and Hirschman 1982; Nevskaya and Albuquerque 2019), we can determine the level of consumer satiation experienced to understand further when a consumer is likely to disengage from the game. *Satiation* is the point at which a consumer becomes tired or bored with the game. When satiation at a given point in time (presented as S_T in Figure 2) exceeds a consumer's individual tolerance (presented as IT_T), the consumer will decide to disengage and end the video game session. Therefore, we expect content that only mildly increases consumer satiation (and even potentially decreases it) will be more effective, just as VGCs seek to build and maintain video game experiences (including the interjection of marketing content) that minimize consumer satiation. Furthermore, we expect both the challenge-skill balance and the emotion generated from the in-game experience to impact consumers' satisfaction with the video game session.

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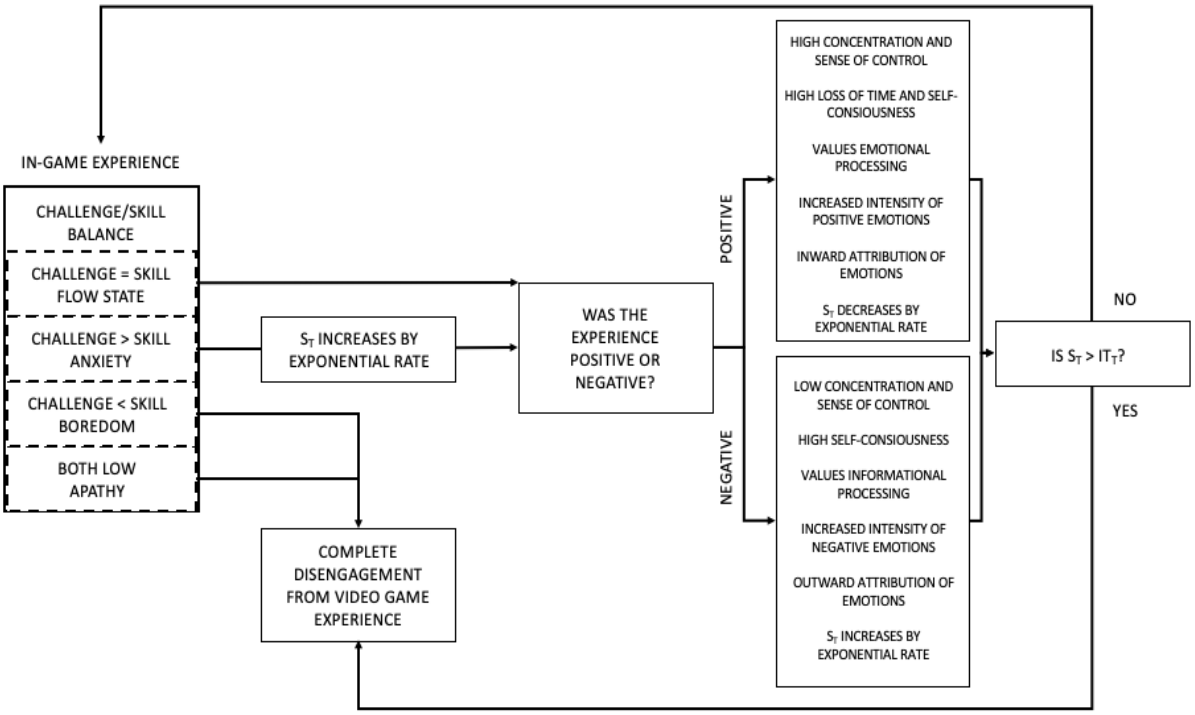


Figure 2: Connecting Consumer Flow in Video Games to Downstream Effects

the challenge-skill balance and the emotion generated from the in-game experience to impact consumers' satisfaction with the video game session.

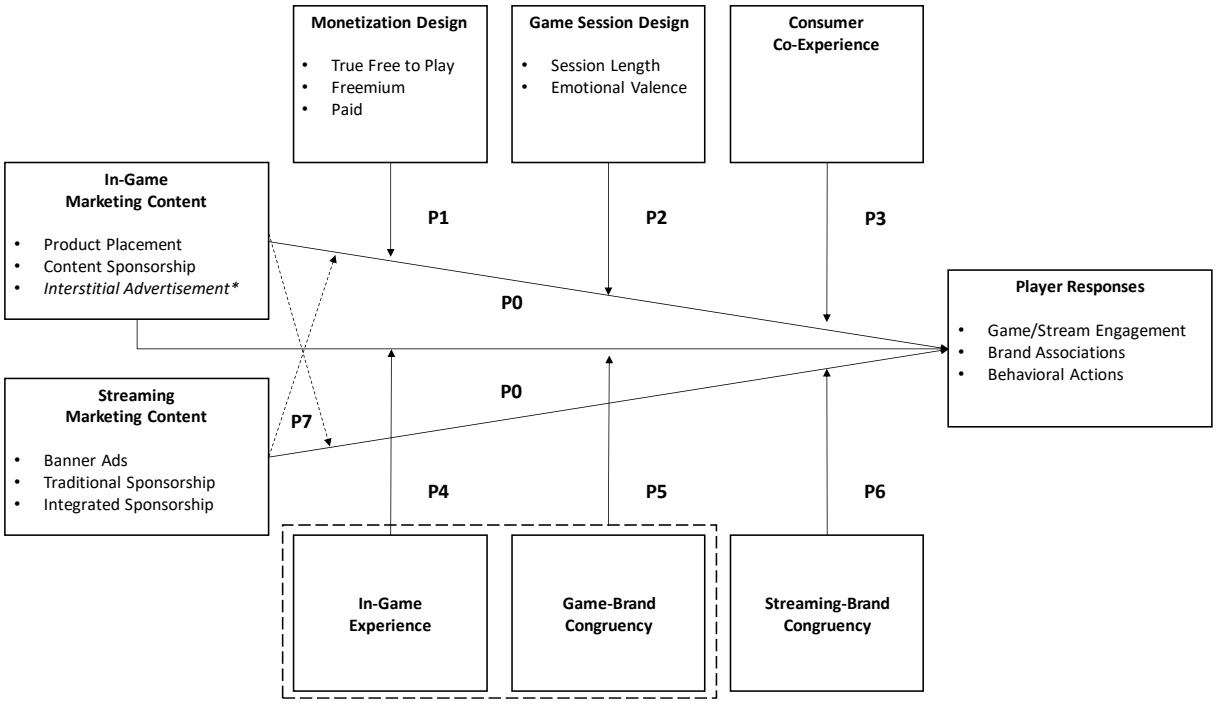
Along with understanding satiation and the associated decision to continue engaging with the video game, flow also impacts how individuals process information and make decisions during the in-game experience. Early research into flow found that once a challenge/skill balance and clear goals are established, individuals experience a high level of concentration, have a complete sense of control over the mediated environment, lose self-consciousness, and even are increasingly unable to accurately gauge the passage of time (Csikszentmihalyi 1977;1990).

In addition, we expect that positive and negative video game experiences impact consumers' affective states as suggested by feelings-as-information theory, which states that individuals frequently use their affective state as information at the time of judgment to evaluate the task at hand (Schwarz 1990). Based on this theory, we expect that following a *positive* in-game experience (such as doing well during a specific game session), consumers attribute positive emotions to the self and process information with an emotion-seeking focus, mainly inwardly attributed emotions—e.g., pride or satisfaction (Schwarz 1990). In contrast, when consumers have a *negative* in-game experience, they experience broken flow states leading to increased negative emotions. Consumers aim to attribute the resulting negative emotions to an external source and shift the negative emotions' cause away from the self, leading them to an information-seeking focus when processing information—especially when it generates outwardly attributed content (Schwarz 1990). Hence, understanding how consumers respond to varying emotions (positive vs. negative, inward vs. outward attribution) in response to flow state immersion is critical for marketers to determine when and how to interject marketing content during in-game experiences.

MARKETERS WITHIN THE VIDEO GAME ECOSYSTEM

Understanding how marketers can leverage the video game ecosystem as a dynamic marketing channel is essential to expanding the channel's presence. Three aspects of the video game ecosystem are of particular interest to both marketing academia and practice: (a) the ecosystem structures that impact content integration, (b) the integration of content into the in-game experience, and (c) the integration of content into the streaming experience. This section discusses these three dimensions and presents propositions for each. Figure 3 and Table 3 provide a visual and textual representation of our propositions.

As mentioned, marketers can communicate to consumers through one of two mediating ecosystem actors –VGCs and streamers. Therefore, marketing content can enter the video game ecosystem as part of either the video game or the streaming experience. In-game marketing content mainly uses three types of content presentation: product placement, content sponsorship, and interstitial advertisements. *Product placement* involves inserting a brand or product into the consumer's video game experience (Glass 2007). This type of in-game marketing content is the most commonly explored type of content in the marketing literature (Jeong, Bohil, and Biocca 2011; Yang et al. 2006). *Content sponsorship* involves customizing characters in a game (particularly multi-player games) through purchasable skins and items, which serve only cosmetic purposes. Brands can use such enhancements to promote their brands. For example, KFC partnered with *Animal Crossing New Horizons*, a social simulation game published by Nintendo, allowing players to dress their characters as Colonel Sanders, complete with a bucket of chicken. Similarly, Louis Vuitton collaborates with *League of Legends*, a multiplayer online battle game by Riot Games, to produce character skins, including Vuitton branded earrings and handbags. Finally, *interstitial advertising* involves ads between game sessions (Chan, Jiang, and Tan 2010).



*****Interstitial advertisements are the focus of P4 and P5, thus we have included a direct link from interstitial advertisements to player responses to help illustrate this fact

Figure 3: Marketers within the Video Game Ecosystem

Table 3: Summary of Propositions and Conceptual/Theoretical Arguments

Number	Proposed Relationship	Conceptual/Theoretical Arguments
P1	**Game monetization structure moderates the relationship between the type of in-game marketing content and outcome measures.** • Free to Play → Content sponsorships and interstitial ads are more effective. • Freemium → Interstitial ads are more effective. • Paid → Product placements are more effective.	• Monetization structures impact the reciprocal relationship between VGCs and consumers such that the more "free" a game is, the more willing consumers are to accept marketing content within the video game experience.
P2	**Game session design moderates the relationship between the type of in-game marketing content and outcome measures.** • Short Session Length → Interstitial ads and/or content sponsorships are more effective. • Long Session Length → Product placements are more effective. • Varying Emotional Valence → Interstitial ads are more effective. • Stable Emotional Valence → Product placements are more effective.	• Marketing content must be integrated as a natural part of the video game experience. Because different games allow for different session lengths and emotional valence, marketing content types will be more effective when matched with games that allow the content to be consistent with the gaming content.
P3	**Consumer co-experience moderates the relationship between the type of in-game marketing content and outcome measures.** • Increases valence of emotions experienced • Increases effectiveness of content that consumers engage with • Decreases the chance consumers will engage with content	• Co-experience positively impacts the valence of emotions experienced (Kowert and Oldmeadow 2013) and increases shared discussions regarding marketing content. However, co-experience distracts from the video game experience, making consumers less likely to pay attention to marketing content.
P4	**A player's in-game experience moderates the relationship between the type of in-game marketing content and outcome measures.** • After positive experiences → Content-focused on flow maintenance is more effective. • After negative experiences → Content-focused on flow restoration is more effective .	• After a positive video game experience, consumers want to maintain their current flow states. Thus, content aimed at doing so is more successful. On the other hand, after a negative experience, consumers desire information designed to restore their broken flow states.

Table 3 Continued

P5	**Game-brand congruency moderates the relationship between a player's in-game experience, the type of in-game marketing content, and outcome measures.** • After positive experiences → High game-brand congruence is more effective. • After negative experiences → Low game-brand congruence is more effective.	• Game-brand congruent content is more likely to remind consumers of their most recent experience. Thus, it is most effective when flow states are maintained. Incongruent content is more effective after negative experiences when consumers actively seek information that differs from their recent experience.
P6	**Streaming-brand congruency moderates the relationship between the type of streaming marketing content and outcome measures.** • High/low stream integration → High stream-brand congruence is more effective. • Moderate stream integration → Low stream-brand congruence is more effective.	• During moments of high- and low-stream integration, content is shown *during* the streaming experience, making highly congruent content more effective. When sponsorship breaks occur (a form of moderate integration), there is a *natural break* in the experience that allows for low-congruence content to be more effective.
P7	**Presenting streaming marketing content moderates the effectiveness of in-game marketing content (and vice versa) such that consumers exposed to both will exhibit higher levels of outcome measures.**	• Consumer engagement with the streaming experience allows for active and passive immersion, deepens social networks, and increases knowledge of specific games. This engagement makes flow easier to achieve in both the streaming and in-game experience.

Streaming marketing content leverages tools similar to influencers' marketing tactics. Banner advertisements that remain on screen while a streamer plays a game are the most basic way of presenting marketing content. In addition, streamers can leverage *traditional sponsorship* techniques (e.g., by taking a small break while streaming to mention their partnership with a brand or product). With *integrated sponsorship*, streamers promote products through the streaming experience. For example, Totino's pizza rolls partnered with streamers to promote their product, not by mentioning it by name, but instead by eating it on stream each time they won a game (DigiDay 2016). Integrated sponsorship leverages an experience's emotional intensity to integrate brands in unique ways not available through other marketing channels.

Marketers can use these forms of marketing content to elicit specific consumer responses. A key issue is that marketers' concerns must be balanced with those of the other ecosystem actors (i.e., consumes, streamers, and VGCs) so that the ecosystem can remain synergistic. In this context, three measures of marketing activity are of interest to the ecosystem: (a) (dis)continuation of engagement with the in-game/streaming experience, (b) brand associations created by marketers' actions, and (c) consumers' behaviors as a result of the marketing content.

The Impact of Ecosystem Structures on Content Integration

Monetization structures. VGCs monetize their games in three primary ways: true free-to-play, freemium, and upfront payment. One of the most impactful innovations in the video game industry has been the emergence of a *free-to-play* monetization. Free-to-play video games allow consumers to access all elements of core gameplay for free as a way to build large audiences to monetize in other ways (Luton 2013). Such free-to-play games as *Fortnite, League of Legends,* and *Call of Duty: Warzone* typically leverage large multiplayer digital environments to create an exciting and high-energy experience. As consumers become more immersed in the game, they can

purchase digital content in some cases; but this content has no impact on the core gameplay and only provides an option for character customization by leveraging the social connections formed through the multiplayer environment..

Many games claim to be free-to-play but instead force consumers to buy in-game content to continue playing the game effectively. In games with this "freemium*"* monetization, gameplay sessions available for free are purposefully designed to be shorter. This design incentivizes consumers to make small purchases of digital products (commonly referred to as *microtransactions*) in order to advance their game progress (Evans 2016). Many mobile games, such as *Candy Crush Saga* and *Clash of Clans,* use this monetization structure successfully. For example, *Candy Crush Saga* and *Clash of Clans* report daily in-game purchase figures of two-to-three million dollars (Business of Apps 2022).

The last form of monetization structure that VGCs commonly use is the traditional method of *paid* monetization by having consumers pay upfront to access a video game, either one fixed amount or a reoccurring subscription. These games, such as *Legend of Zelda: Breath of the Wild* and *World of Warcraft*, tend to create consumer engagement through strong narratives compared to other video games and range from single-player to massively multiplayer. Instead of gathering a large audience to monetize, these games are designed to make most of their revenue by selling the gaming content itself.

One of the most fundamental concepts in marketing is the intricate relationship between price, quality, and perceived value of a product or service (Zeithaml 1988). When consumers pay for a product or a service, they expect the provider to reciprocate the transaction with a value matching what was paid. A game's monetization structure shifts how reciprocity is attributed to consumers and VGCs. Therefore, we propose that a video game's monetization structure impacts

the strategies marketers should use when designing and promoting content to consumers. Specifically, we propose that if a game uses a true a free-to-play model, marketers should leverage content sponsorship and interstitial advertising as their primary vehicles for delivering marketing content through the in-game experience. Under true free-to-play, consumers feel a need to reciprocate the VGCs for providing an experiential product for free, making them more willing to take actions supporting VGCs. Such actions include, but are not limited to, purchasing digital content within the game and a higher willingness to be exposed to interstitial advertisement.

Freemium games share many of the same characteristics as true free-to-play games, thus, consumers experience feelings of reciprocity because they are given a free product. However, these games' monetization sometimes creates negative emotions toward the VGCs by making consumers feel exploited. This sense of exploitation makes using content sponsorships difficult because most monetary resources from consumers are directed toward buying in-game content necessary for continuing. Therefore, for freemium games, we expect interstitial advertisements through partnerships with the VGCs to be most effective. If executed correctly, VGCs can remove most negative emotions regarding feelings of exploitation by tying needed in-game content to watching interstitial advertisements. Instead of requiring consumers to spend money in order to advance, VGCs can provide the option to engage with marketing content instead, giving consumers a way to continue enjoying the game. Also, by leveraging the placement of marketing content, marketers receive an indirect positive association from consumers because their content saves consumers money and allows them to continue enjoying the video game experience.

Finally, for paid games, we expect in-game product placement to be most effective. For this type of monetization, the onus of reciprocity is shifted to the VGC instead of the consumer. As consumers purchase a game or a subscription, they expect a positive video game experience in

return. If the VGC tries to present interstitial advertising after a consumer has already paid to gain access to the game, we expect the consumer to view the marketing content and the VGC negatively because they will feel that the VGC is exploiting them. Thus, we do not expect in-game product placement to detract from the in-game experience, thus leading to the following proposition:

> *P1: Game monetization structure moderates the relationship between the type of in-game marketing content and outcome measures.*
>
> *Specifically, we propose that (a) content sponsorship and interstitial advertisement are likely to be most efficient for true free-to-play games, (b) interstitial advertisement is likely to be most efficient for freemium games, and (c) product placement is likely to be most efficient for paid games.*

Game session design. Along with the monetization structure, game session design is a significant factor influencing how and where marketing content should be integrated into the video game experience. As mentioned, there are many types of video games, with different objectives designed to create profound digital experiences. Although many game-session design elements could be investigated, two directly impact marketing content: (a) the game session's average length and (b) the emotional valence created by the in-game experience. *Game session length* refers to the time the consumer needs to finish an objective predetermined by the VGC. This length varies widely depending on the type of game. For example, most mobile games—such as *Candy Crush Saga* or *Clash of Clans*—are designed to have session times of roughly one to two minutes as consumers make their way through a typically streamlined objective, such as solving a small puzzle. Many multiplayer games— such as *Fortnite*, *Call of Duty: Warzone,* and *League of Legends*—have more complex objectives (e.g., being the last person out of 100 to survive in a high-action war simulator), requiring a more extended period to complete a game session (between 10 and 45 minutes). Other games—such as *Minecraft* or *Legend of Zelda: Breath of the Wild*—are

purposefully designed to engage players for continuous periods, leading to game sessions as long as the consumer desires.

There is a direct relationship between game session length and natural breaks between sessions that consumers experience. For example, after each session of *Call of Duty: Warzone*, a consumer must take a three-to-five-minute break before the next game session. These breaks are typically caused by the need (a) to find enough players to fill the 'lobby' so that the game can begin and (b) to load in the complex digital environment where the video game experience occurs. Though these breaks are not as long for games like *Candy Crush Saga*, they do exist in shorter capacities.[4] These natural breaks provide opportunities for more dynamic and adaptable forms of marketing content. Thus, we expect that (a) interstitial advertising will be most effective when games are designed with shorter sessions and with natural breaks for the content to be integrated and (b) in-game product placement and content sponsorship will be more effective for games with longer sessions, which will not disrupt the in-game experience.

The second element of game design that marketers must consider is the emotional valence generated for the consumer through the in-game experience. Certain games (typically, but not always, with purposefully shortened game sessions) create intense swings in emotions during gameplay sessions, while others provide a more stable experience. Although both types of games can be valuable mediums to present marketing content, games with high levels of emotional valence (positive or negative) provide marketers with the opportunity to gather state-specific information. Therefore, we expect (a) dynamic interstitial content to be used based on the information provided by highly varying emotional valence games and (b) when valence is more stable, in-game product placement will be most effective. Thus, we propose the following:

[4] There are few natural breaks in games designed for continuous play with indefinite game session lengths.

P2: Game session design moderates the relationship between the type of in-game marketing content and outcome measures.

Specifically, we propose that (a) interstitial advertisement and content sponsorship is likely to be most efficient for games with shorter sessions, (b) product placement is likely to be most efficient for games with longer sessions, (c) interstitial advertisement is likely to be most efficient for games with varying emotional valence, and (d) product placement is likely to be most efficient for games with stable emotional valence.

Consumer co-experience. Many of the most popular video games—e.g., *Fortnite, League of Legends, and Call of Duty: Warzone*—and streaming services create digital environments encouraging direct interaction with other consumers online during the experience. This interaction creates a setting where consumers' engagement with other consumers during the video game experience impacts their interpretation of marketing content interjected during the game session. Battarbee (2003) defines *co-experience* as the intersection between a user's personal experience and the social interactions occurring during the experience. This definition highlights impact of the presence of others during an experience on an individual's perceptions of it (Forlizzi and Battarbee, 2004). Lim et al. (2012) suggest that for co-experience to occur, three conditions must be fulfilled: (a) individual participation, (b) cognitive communion (i.e., the perception that an individual shares information with others during the experience), and (c) resonant contagion (i.e., the ability to influence others and to be influenced by others during the experience).

As consumers play the game, their communications with other consumers directly impact their perceptions of the experience. Since consumer co-experience requires sharing relevant information among parties, it only occurs when a consumer is in direct contact with another consumer, generally through voice chat capabilities in the video game context. We propose that co-experience impacts consumers in three ways: by increasing the valence of emotions they

experience, increasing the effectiveness of marketing content that consumers engage with, and reducing the chance that a consumer will engage with the marketing content.

First, evidence suggests that co-experience during the video game experience leads to heightened consumer responses. For example, previous research has shown that when video game players believe they are playing with others, they experience higher levels of arousal (Kowert and Oldmeadow 2013) and heightened levels of both enjoyment and frustration (Bowman, Kowert, and Cohen 2015). In addition, whenever one player has an emotional experience during the game, emotional contagion causes other players that directly communicate with that player to experience similar emotions (Cohen and Lancaster 2014). Therefore, these results suggest that co-experience within video games leads to an increased valence of emotions experienced by consumers.

Second, because marketing content is perceived as part of the in-game experience, the effects of co-experience on the video game experience are likely to bleed over to the interpretation of marketing content. If two or more players engage with marketing content together, the opportunity for discussions increase, including the possibility of positive word of mouth (Alexandrov, Lilly, and Babakus 2013). Thus, co-experience of the video game experience is likely to increase the effectiveness of marketing content that consumers engage with.

Third, although the increased emotional valence and positive perceptions of marketing content provide opportunities for marketers, not everything about co-experience is positive from the marketers' perspective. Many games contain natural breaks between game sessions that allow for interstitial advertisements. When consumers finish a game session, they usually will remain focused on the digital display unless something causes them to disengage with it, allowing marketing content to be effective in these positions. However, when co-experience occurs, consumers may choose to interact with other consumers rather than direct attention to the digital

display. Such interaction increases the likelihood that a consumer does not engage with presented marketing content sufficiently for positive reactions to occur. Although the co-experience may lead to increased effectiveness of marketing content *contingent on the consumer being engaged with such content*, it likely also reduces the chance that a consumer will engage with it. However, it is unknown what the net effect is likely to be. Thus, we propose the following:

> *P3: Consumer co-experience moderates the relationship between the type of in-game marketing content and outcome measures.*
>
> *Specifically, we propose that co-experiencing the in-game experience (a) increases the valence of emotions consumers experience, (b) increases the effectiveness of marketing content that consumers engage with, and (c) reduces the chance that a consumer will engage with the marketing content.*

Integrating Content into the In-Game Experience

In-game experience. As consumers engage with the video game, they vary in their flow state immersion based on whether they perceive a given video game experience as positive or negative. The goals of marketing content in the video game ecosystem are (a) to benefit marketers and (b) to present content that causes consumers to engage with the video game for more extended periods, thus directly benefitting both VGCs and streamers. Because one consequence of negative consumer in-game experiences is increased consumer satiation, a key goal in presenting marketing content must be to not increase satiation or to even reduce it.

Consumers with positive in-game experiences are in highly immersive flow states with a significant cognitive focus on the game itself. For content to be effective when presented to consumers in such states, it should fit into the immersive flow states generated and align with the emotional sentiment created by the in-game experience. For example, suppose a player has a positive in-game experience. In that case, marketing content should focus on maintaining the immersive flow states already present (e.g., matching the marketing content's audiovisual

components to the in-game experience) and aligning any emotional appeals with the emotional valence generated by the experience. From a flow and feelings-as-information perspective, we expect that after a positive in-game experience, content that extends the immersive flow states generated by the experience will be most effective.

On the other hand, as consumers have a negative in-game experience, they experience broken flow states and negative emotions, which will lead them to actively seek information in order to help them attribute the emotions generated by the experience to a source outside of the self. Therefore, content designed to redirect consumers' attention away from the game while attributing the negative emotion to some entity outside of the consumers' control should help restore flow states and be received more positively by consumers. Thus, we propose the following:

> *P4: A player's in-game experience moderates the relationship between the type of in-game marketing content and outcome measures.*
>
> *Specifically, we propose that content designed to maintain (restore) flow states regarding emotional valence and emotional attribution is likely to be most efficient after a positive (negative) in-game experience.*

Game-brand congruency. In principle, any brand can use the video game's ecosystem effectively if presented in ways that are congruent with the consumer's experience. Congruency is a concept that has been used throughout marketing literature to understand marketing phenomena, such as interpersonal relations (Reingen et al. 1984), celebrity influences (Misra and Beatty 1990, and brand loyalty (Kressmann et al. 2006). In the video game ecosystem, we define *game-brand congruency* as the degree of similarity between the in-game experience and the branded content presented to players in terms of product/service type and the presentation of the content itself.

Achieving a high level of game-brand congruency is easier for some brands (e.g., other video games or products/services in the digital realm) than for others (e.g., financial services,

healthy food). However, a vital characteristic of the video game ecosystem is that it provides opportunities for both congruent and incongruent brands to present content due to the availability of moment-by-moment information regarding a consumer's cognitive and affective state. Negative experiences while using other marketing channels usually lead to negative marketing content's success. The video game ecosystem is different because such negative experiences provide an opportunity to present content that leads to positive outcomes for the brand and builds positive synergies for all ecosystem actors.

Based on feelings-as-information theory, following a positive in-game experience, consumers seek information validating their current experience, both from an emotional and a content standpoint. In contrast, after a negative in-game experience, consumers seek information they can use to attribute the negative emotions experienced outside of the self. Because consumers use branding signals to interpret information about the brand (Connelly et al., 2011), we expect that game-brand congruency provides relevant information to consumers. Therefore, marketing content presented as congruent with the in-game experience should be more effective when interjected after a positive experience. We also expect marketing content that is presented as incongruent with the in-game experience to be more effective when interjected after a negative experience. Thus, we propose the following:

> *P5: Game-brand congruency moderates the relationship among a player's in-game experience, the type of in-game marketing content, and outcome measures.*
>
> *Specifically, we propose that content congruent (incongruent) with the gaming experience is likely to be most efficient after a positive (negative) in-game experience.*

Integrating Content into the Streaming Experience

Streaming-brand congruency. Along with the video game experience, the streaming experience provides an avenue for marketers to enter the video game ecosystem. The streaming

experience shares passive and active immersion elements that confound how consumers internalize the experience. Thus, it is differentiated from the in-game experience, which is almost a pure form of an actively immersive experience. On the one hand, consumers do not actively play the game during the streaming experience but watch someone else play, like other passively immersive experiences such as television. On the other hand, consumers actively engage with and shape the streaming experience by communicating in real-time with the streamer and other co-experiencing consumers.

This combination of active and passive immersion complicates marketing in the streaming experience compared to marketing in the in-game experience because the consumer experience in this environment is less clear. Making assumptions about feelings-as-information is difficult because we do not understand whether consumers internalize the stream's emotional experience. Nevertheless, given the experiential dimension of the streaming experience, we still expect flow states to play a role in interpreting marketing content, especially for consumers who are communicating with streamers and other consumers. Marketers must, therefore, integrate marketing content in ways consistent with the streaming experience while considering that consumers may vary on the level of immersion they are experiencing.

As discussed, there are three primary forms of communicating marketing content through the streaming experience: banner advertisements, traditional sponsorship, and integrated sponsorships. These forms of streaming marketing content can be organized according to the level at which each is integrated into the streaming experience itself. Banner ads are the least integrated into the streaming experience because they do not directly impact the streamer's actions. Traditional sponsorships are in the middle in terms of degree of integration because they require the streamer to take a break from the regular gameplay experience to describe the sponsorships.

However, sponsorship itself is a necessary part of most successful streamers' revenue streams and an expected part of the consumers' streaming experience. Therefore, it is viewed as a part of the streaming experience even though it is structurally different from the video game's content around which the streamer builds his/her following. Integrated sponsorships are the most integrated form of content delivery because they fit into the natural streaming experience; and, if executed correctly, they merge content delivery and streaming experience into a highly synergistic moment that creates unique streamer-consumer interactions that add to the streaming experience, creating benefits for both the marketer and streamer.

Marketers aiming to position their brand as congruent to the streaming experience should leverage content structures that are either low or high in-stream integration (i.e., banner advertisements or integrated sponsorships). For low integration content, we expect congruent content to maximize consumer brand associations and actions while not disrupting the streaming experience. If low integration content is congruent with the experience, the risk that consumers are distracted is reduced, and this synergistic approach instead allows for enjoying the streaming experience while building positive brand associations. For high integration content, moments throughout the streaming experience should be leveraged because these content structures should provide highly positive associations due to consumers' connecting the brand to the unique streaming experience.

Marketers aiming to position their brands as incongruent with the streaming experience should find traditional sponsorships most effective because these typically occur during breaks in the streaming experience and allow for streamers to leverage their parasocial relationships with consumers to build positive brand associations (much like traditional influencer marketing),

especially when the streamers emphasize that these brands' sponsorship helps them produce the streaming experience for consumers. Thus we propose the following:

> *P6: Streaming-brand congruency moderates the relationship between the type of streaming marketing content and outcome measures.*
>
> *Specifically, we propose that (a) content structures that are high or low in in-stream integration are likely to be most efficient for brands that position their brand as congruent to the streaming experience, and (b) content structures that are moderate in in-stream integration are likely to be most efficient for brands that position their brand as incongruent to the streaming experience.*

Cross-ecosystem effects. One of the unique characteristics of the video game ecosystem is its efficiency in capturing consumers. For example, as consumers spend more time engaged with Twitch and the in-game experience, they decrease the time spent across other marketing channels, such as social media or television (Influencer Marketing Hub 2018). The video game ecosystem allows for consumers to engage with the content of their choice across multiple levels of immersion, (a) highly active immersion through the in-game experience, (b) lower active immersion by communicating while engaging with the streaming experience, and (c) passive immersion by watching the streaming content without taking advantage of the communication capabilities. Therefore, it enables consumers to engage with the ecosystem no matter their desired immersion level or where they are located.

Besides enabling consumers to engage with their chosen video game, an additional side effect of the streaming experience is deepening social networks developed by consumers. As consumers communicate throughout the streaming experience, they build social relationships with other co-experiencing consumers (Sjoblom and Hamari 2017). These deep social connections offer consumers a motive to keep reengaging with the video game and help them remain in the video game ecosystem even after negative in-game experiences (Hilvert-Bruce et al., 2018).

A significant benefit of consumers' engaging with the streaming experience is the impact on *future* flow state formation. For consumers to enter into flow states, three conditions must be fulfilled, including an equal balance of the following: an individual's skill level, the challenge level the environment poses, and a continual establishment of clear goals (Csikszentmihalyi 1977). Previous research has shown that consumers engage with the streaming environment to create deeper knowledge about the game that helps them increase their in-game skill set (Sjoblom and Hamari 2017). As individuals become more accustomed to an experience, their habituation in terms of the activity increases, helping them enter flow states associated with the experience in the future (Nevskaya and Albuquerque 2019). Consequently, we expect that as consumers engage more with a streaming experience, the antecedents to flow are more easily met, making flow easier for consumers to enter, in turn making future in-game experiences more enjoyable.

Therefore, if marketers deliver marketing content through either the video game or streaming experience, they should also advertise through the other form. The streaming experience (a) allows for consumption of content similar to that in the in-game experience without the active immersion and specific spatial commitments, (b) builds stronger social connections within specific gaming communities, and (c) helps deepen consumer knowledge about a specific game that assists in creating flow states during future game and stream sessions. Thus, we expect marketers to see an additive effect on the effectiveness of delivering marketing content through the video game ecosystem that is greater than what would be expected from delivering through both the in-game and streaming experiences individually. Thus, we propose the following:

> *P7: Presenting streaming marketing content moderates the effectiveness of in-game marketing content (and vice versa) such that consumers exposed to both will exhibit higher levels of outcome measures.*

FUTURE RESEARCH DIRECTIONS

The video game ecosystem offers a myriad of avenues for future research. While our manuscript examines marketing content's impact on player responses in detail, we discuss below 12 additional research domains deserving particular attention.

The Video Game Ecosystem as a New Marketing Channel

First, the video game ecosystem offers opportunities to marketers that go beyond content placement. Companies can, for example, use it to distribute products—either physical or digital. It can be leveraged as a tool to improve market understanding (e.g., through the analysis of textual, pictorial, and video content) and make firms more market-oriented (Kohli and Jaworski 1990). Firms may develop digital equivalents of their products beyond content creation that provide value to consumers and players, similar to the value created by offline products and services. Improving our understanding of these and other ways of using the ecosystem would be fruitful.

Second, as firms develop a broader understanding of the use of this ecosystem, how can it be integrated into a larger marketing plan? Recent research has, for example, highlighted the complex relationship between word-of-mouth programs, traditional advertising, and sales promotions (Dost et al., 2019). Does the same apply to using the video game ecosystem? What is the most meaningful way to allocate a budget across different activities? Do those recommendations depend on the industry sector or the customer group contacted?

Third, the video game ecosystem includes actors besides marketers, such as VGCs, streaming platforms, streamers/influencers, active players, and passive consumers of content. Each of these constituents deserves a detailed investigation. For example, can streamers be seen as mediators between VGCs and consumers who help to extend the lifetime of games and aggregate

market information? How should streamers best communicate with their follower base to achieve those goals? What is the relationship between influencers' follower size and engagement? How do video game streamers compare to and differ from online influencers (Leung et al. 2022)?

Satiation and Flow

Fourth, the concept of flow is crucial to understanding the video game ecosystem and using it most efficiently. While research has identified ways to measure flow (Novak et al. 2000), these measures are based on survey responses (versus actual behavior) and assume a static view of flow. Can flow be measured reliably using physical responses (e.g., eye movements)? Is flow a dynamic concept that evolves in intensity over the (gaming) experience or a static one that is either present or absent? Can firms rely on new technologies (e.g., virtual reality headsets) to measure flow and use this information to adapt marketing content dynamically?

Fifth, satiation is a central driver of video game engagement. A key challenge for many game developers is low-satiation levels, which reduce the customer lifetime value of gaming users. How can such satiation be managed, either through game design or by cross-promoting users from one game to another once satiation has lowered beyond a certain point? Considering the relevant cost and benefit, is there an optimal level of satiation game developers should aim to achieve?

Sixth, there is a rising concern that video games fuel addiction due to the data-based adaption to optimize flow on which they are inherently based (Economist 2022). On the other hand, flow can improve mental health, particularly languishing (New York Times 2021). Is there a way to use the video game ecosystem responsibly (Haenlein et al. 2022) and leverage flow to improve the wellbeing of consumers and society at large?

The Structure and Evolution of the Video Game Ecosystem

Seventh, we conceptualize the video game communication ecosystem as characterized by a lack of centralized hierarchical control. Participating actors coordinate their activities via either formal or informal relationships with others. Is there an ideal coordination structure among marketing ecosystem actors from the marketer's perspective? Centralized versus decentralized governance modes are more effective for which relationships?

Eighth, engagement among ecosystem actors can take many forms, from formal interactions (e.g., contractual arrangements between VGCs and marketers) to more indirect or informal engagement (e.g., the need to co-align in order to adhere to a set of standards as technology advances). Building on these conceptual arguments and research on relationship marketing (Palmatier 2008; Palmatier et al. 2006; Zhang et al. 2016), which relationship factors are most important for marketers in managing their relationships with different actors?

Ninth, based on heightened concerns regarding privacy and security (Martin et al. 2017) and the possibility of partner firms' unethical practices (Sullivan, Haunschild, & Page 2007), there may be reputational risks based on relationships with some actors' parts in the video game communication ecosystem. Such risks may be elevated based on the informal nature of some ecosystem actor relationships. What are the potential sources of such reputational risk, and how can marketers and other ecosystem actors mitigate such risk?

Tenth, the video game ecosystem is changing rapidly and is still in flux, as indicated by a series of recent purchases and acquisitions (e.g., Microsoft's plan to acquire *Activision Blizzard*, owner of *Call of Duty*, and *Candy Crush*, among others). How do video games fit into the bigger picture of new technologies used in marketing (Hoffman et al. 2022), such as social media (e.g., Instagram, TikTok), mobile games, esports (video games played competitively and traditional

sports transferred into the online environment), and virtual social worlds (Kaplan and Haenlein 2009)? How do these platforms relate to each other and to such concepts as blockchain and non-fungible tokens (NFTs)?

The Dark Side of the Video Game Ecosystem

Eleventh, how can companies that are part of the video game ecosystem avoid the dark side of video games? One example that has been discussed in this context in the popular press is the emergence of addictive gambling behaviors due to the widespread use of loot boxes (The Guardian 2021) —i.e., virtual treasure chests of undisclosed items that can be used in games and purchased at a fixed price without knowing the detailed content before purchase. Other examples include pressure and stress for streamers in their professional role with damaging and even fatal effects on their wellbeing.

Finally, conspiracy theorists recently discovered Twitch as a tool to spread fake news and disinformation (New York Times 2021). Given that nearly 40% of all social media users regularly share disinformation, how are disinformation messages structured and spread within the video game ecosystem? How do influencers' structures (e.g., micro vs. macro influencer, connections with other influencers) interact with message elements (e.g., emotional valence, cognitive activation, and credibility) to impact how individuals react to disinformation messages? Which steps can marketers, regulatory agencies, and other stakeholders take to combat disinformation?

GENERAL DISCUSSION

As mentioned in the introduction, our manuscript examines the potential of video games as a dynamic marketing channel through the lens of three research questions. First, how do video games and the gaming industry’s surrounding structures function together as an ecosystem to form a marketing channel for integrating marketing content? Second, how does video games’ experiential

nature enable this ecosystem to function differently from other marketing channels, such as social media or television? Third, what should marketers do to leverage this channel's unique capabilities to maximize their return on investment?

Regarding our first research question, we show that marketers, consumers, VGCs, and streaming services interact in ways that form an interconnected ecosystem. This ecosystem conceptualization highlights the synergies among different ecosystem actors and shows that each actor creates value in various ways. Regarding our second research question, we leverage the ecosystem concept alongside flow theory to show the many ways in which the video game ecosystem operates differently, both positively and negatively, than other marketing channels. To address our third research question, we propose seven unique propositions from the marketer's perspective to help highlight the important capabilities of the video game ecosystem while stressing the importance of approaching it differently from other marketing channels. Finally, we propose 12 future research directions to help kickstart marketing research into the video game ecosystem. In doing so, we lay a foundation for marketing researchers to explore the possibilities presented by the video game ecosystem and provide guidance for marketing practice on how to produce and present content appropriately throughout the video game ecosystem.

The Rise of Esports

An area that deserves further attention is the growth of esports, which is predicted to achieve more than 30 million monthly U.S. viewers in 2022, growing at a rate of 11.5% annually (Insider Intelligence 2022). Esports is the phenomenon of multiplayer video games played competitively (typically by professional gamers) for spectators. Like traditional sports, marketing opportunities exist through media rights, live events, merchandising, sponsorships, and advertising. Esports' revenue is expected to exceed $1.8 billion in 2022 (Insider Intelligence 2022); and many esports

events' viewership rivals that of traditional sporting events—e.g., the 2019 League of Legends World Championship's finals were watched by over 100 million viewers, more than the Super Bowl's viewership that year (CNBC 2019). Thus, it is necessary to understand how esports fits into the modern marketing strategy.

Regarding the video game ecosystem, esports are most similar to streaming services. Considering that most of these events' viewership occurs live through Twitch and Youtube, many of the same principles apply. However, some key differences must be explored from the marketing perspective. First, compared to most streaming experiences, consumers do not interact directly with influencers while watching these events. Instead, most interaction occurs with other fans through chat functions. This difference alone should result in many differences compared to the average streaming experience. In addition, streamers with a competitive focus tend to build followings differently than streamers with a casual focus (Anttila 2018; Dux and Kim 2018). As such, marketing through esports will likely differ compared to marketing through most streamers. Although outside this paper's scope, there is a need for research investigating esports' potentials in marketing.

Information Exchanges between Marketers and VGCs

As discussed earlier, the most significant disadvantage of the video game ecosystem compared to other marketing channels is its unstructured content distribution, which results in information asymmetries between VGCs and marketers. Considering the video game industry's highly competitive nature, a high level of secrecy exists at the firm level for VGCs regarding sharing information with outside parties (Polygon 2015). Many VGCs, particularly larger firms such as Microsoft and Tencent, leverage their vast array of IP to build competitive advantages from proprietary data practices. Although this secrecy leads to maintaining competitive advantages

(Nayyar 1990), it creates information asymmetries as marketers begin to explore using the video game ecosystem as a marketing channel.

Because the video game ecosystem differs significantly from other marketing channels, marketers need clear guidance on the types of data each VGC can collect to effectively build synergistic marketing content for all parties involved. Thus, VGCs must be willing to address information asymmetries between them and marketers for the video game ecosystem to reach its full potential. If the trend of market consolidation continues (e.g., Microsoft purchasing Activision), most content distribution may become more centralized to just a few major VGCs. Such centralization likely encourages sharing more information with marketers to help gain additional competitive advantages over other VGCs.

Influencers within the Video Game Ecosystem

Our conceptual framework does not fully explore all interactions that influencers create during the streaming experience, given our focus on the marketer. Specifically, there are two areas where the video game ecosystem creates unique interactions from the streamers' perspective: (a) influencer-consumer relationship's strength and (b) influencer marketing's role in maintaining a product's life cycle.

First, compared to other forms of influencer marketing, there is reason to believe that video game streamers build stronger para-social relationships (Labrecque 2014) due to directly interacting with consumers during the streaming experience. These relationships should impact how social networks are formed and maintained in this ecosystem. Second, since influencers rely on VGC products to build their content, streamers provide additional value to the ecosystem by extending VGC product and marketing life cycles. For VGCs, this extension is done by streamers continually reminding consumers to engage with a game and keeping the game in the public sphere

for extended periods. For marketing content, this extension involves connecting marketing content to both games and streamers so that if a game loses favor, marketers can still leverage the connections that consumers have built with streamers. Those relationships deserve deeper investigation.

Consumers and Co-Creation

Although not directly addressed in this paper, one of the most complex parts of the ecosystem is the multiple roles consumers can play. For example, consumers of a game can also be streamers of the same game. Considering video game streaming requires consumer engagement with the streamer, consumers co-create the streaming experience. Pair this co-creation with the input consumers provide to VGCs through streamers, and consumers also indirectly co-create the maintenance of the video game experience. Although we do not address this tension in the ecosystem section, we believe there is potential in exploring the multiple roles consumers play in this ecosystem and how each of those roles contributes to co-creating experiences in the video game ecosystem.

CONCLUSION

Although this article provides a broad perspective of the video game ecosystem, it is only a first step toward understanding the many areas in which video games can be of marketing interest. Some of these topics include, but are not limited to, digital entertainment's evolution, video games' capabilities for educational purposes, and Twitch's expanding roles outside of gaming. In addition, we want to emphasize that marketers should not consider the video game ecosystem in isolation, but instead learn how it can be leveraged in combination with other marketing channels to build more encompassing marketing strategies in order to effectively engage consumers. We

believe that this paper will jumpstart interest in video games' role in marketing such that these other important topics will be explored in the near future.

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APPENDIX

Web Appendix A Table WA1: Opportunities for Different Types of Video Games

Type of Game	Description	Marketing Strengths	Marketing Obstacles	Effectiveness of Content Type		
				Product Placement	**Content Sponsor-ship**	**Interstitial Advertise ments**
Console Video Games *Video games that are played on high powered electronics specifically designed for gaming (e.g., Sony's PlayStation, Microsoft's Xbox). Roughly 45% of all video games played are done so through a console. Due to higher computational power compared to mobile, these games tend to be more complex and are designed to have extremely high levels of consumer immersion. Almost all Twitch streaming and Esports gaming is performed on games built for consoles. Consumers who play on consoles tend to be more serious gamers.*						
Single-Player Adventure Video Games	Designed for a single player to navigate through a vast, generally open environment to fulfill some significant 'quest'. Online integration generally serves to connect players in different locations for cooperative purposes. Contains high levels of narrative elements to deepen the player's experience with the game (e.g., Elder Scrolls, Legend of Zelda, Final Fantasy)	→ Narrative elements allow for highly coordinated omnichannel marketing campaigns. → Product placement can be woven into the narrative to gain positive associations from the game itself.	→ Narrative elements make marketing content highly disruptive to the experience. → Games are typically expensive and paid for up front, thus, reduced opportunity for more advanced types of marketing content.	✓	**X**	**X**

Table WA1 Continued

Cross-Platform Multiplayer Video Games	Designed for multiplayer use through online connections; games in this category tend to be highly strategic and competitive and typically contain loose narrative elements to create higher levels of immersion. However, the narrative is not the primary purpose of the game. (e.g., Fortnite, Call of Duty, League of Legends, Overwatch)	→ High levels of immersion allow for VGCs to accurately measure cognitive and affective states. → Tend to have natural breaks for loading which allow for more complex forms of marketing content delivery.	→ These video games typically do not rely on marketing revenue to make a profit, thus, VGCs will not include content if it takes away from the consumer experience.	✓	✓	✓
Mobile Video Games *Video games that are played on mobile devices such as a cell phone or tablet. Roughly 55% of all video games played are done so through a mobile device, and this number is rapidly growing. These games tend to be broad in their gaming content, but simpler in execution, which leads to a wide variety in the audience of consumers. Due to limited processing power and controls, these games typically aim to be played for short periods of time, but multiple times throughout the day.*						
Puzzle-Based Video Games	Typically designed for single-player usage. Designed similarly to early era video games (e.g., PacMan, Tetris) such that the sole purpose is to advance to the next level. Minimal narrative elements exists to deepen the player's experience with the game itself. (e.g., Candy Crush, Bejeweled, Angry Birds)	→ Short game session leads to ample opportunities for marketers to naturally interject content. → Many mobile games base revenue stream solely on marketing content, thus, marketers have more leverage over these VGCs.	→ Short game sessions can frustrate consumers and lead to over-presentation of marketing content. → Screen limitations and lack of social features only allow for interstitial advertisements to be used. → Consumer retention is low, leading to shorter game lifecycles.	**X**	**X**	✓

Web Appendix B – Flow vs. Narrative Transportation

When analyzing the video game ecosystem, there are many theoretical perspectives that can be used to explain different aspects of the ecosystem. For much of this paper, flow theory (Csikzsentmihalyi 1977) is used by the authors to connect the consumer in-game experience with the multiple touchpoints that exist for marketers to engage with consumers throughout the video game ecosystem. As an alternative to flow theory, some aspects of the ecosystem can be explained using the theory of narrative transportation (Green and Brock 2000), which is defined as a consumer's immersion into a presented story. Although this theory explains many scenarios throughout the consumer's in-game experience, the authors believe flow theory to be the more appropriate framework for this article for three reasons: (1) many new video games do not use narratives to build the in-game experience, (2) narrative transportation does not adequately explain how marketers should build content for this ecosystem, and (3) flow theory addresses future consumer engagement more thoroughly than narrative transportation.

First, for narrative transportation to be used, narratives must be present in the consumer experience. A narrative in this case is defined as a story the consumer interprets in accordance to his/her prior knowledge, attention, demographics, and personality (Fishbein and Yzer 2003). As shown in Table WA1, narratives are not a necessary element for a video game. In fact, many games, specifically mobile puzzle games and cross-platform multiplayer games tend to have low levels of narratives for the consumers to engage with. As such, though narrative transportation can be used to understand consumer experiences for some games, it does not have the ability to explain a sizable portion of consumers' interactions with the video game ecosystem.

Second, narrative transportation has been shown to be powerful in understanding how stories can impact a consumer's immersion and as such impact their evaluation of marketing

content associated with those narratives. For example, narrative transportation has been shown to increase positive brand attitudes and evaluations (Escalas 2004) and reduce critical thoughts regarding content (Escalas 2004; Appel and Richter 2010). Alongside this, narrative transportation naturally fits many elements of the video game experience such as the importance of identifiable characters (Green and Brock 2000; Van Laer et al. 2014) and the presence of user-generated interactions with stories (Van Laer et al. 2019). However, one of the largest weaknesses related to using narrative transportation to explain consumer and marketer interactions within the video game ecosystem is its inability to direct marketers how to build content. Research regarding narrative transportation's role in marketing has generally been used to show how narratives generated by the marketing content impacts consumers. Though content in this ecosystem can use narratives, the narrative most important to understand is how the in-game narrative will impact interpretation of content the consumer will be exposed to in future moments which may or may not be related to the narrative of the in-game experience. Along with this, there are many moments in the video game ecosystem in which marketers want to present content that is incongruent to the in-game experience (see propositions 4 and 5 in the article) which cannot be adequately explained through narrative transportation.

Finally, flow theory more accurately predicts future consumer behavior than narrative transportation. As shown in Figure 2 in the article, using flow theory, VGCs and marketers should be able to have a clear understanding of how the in-game experience impacts consumers, specifically regarding their decisions about whether to reengage or disengage with the in-game experience. Although narrative transportation can provide an understanding of how consumers immersed into the experience will behave immediately, flow theory more accurately predicts what happens when immersion does not occur as well as when the game session is over.

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CHAPTER 2: ESSAY 2

INFLUENCER MARKETING AND SOCIAL NETWORK FORMATION ON VIDEO GAME STREAMING PLATFORMS

Abstract

While influencer marketing has become an integral part of marketing strategies, most marketing research to this point has focused on how consumers operate with influencers on traditional social media platforms, such as Facebook and Instagram. As such, there is a lack of understanding of how consumers interact with influencers on video game streaming platforms (VGSPs), which produce 24 billion hours of content watched yearly by 140 million unique consumers. This article aims to show how influencer-to-influencer (I2I), influencer-to-consumer (I2C), and consumer-to-consumer (C2C) relationships differ on VGSPs compared to traditional social media platforms, and how these relationships impact consumers downstream. The authors start by identifying two unique types of influencers on VGSPs (video game streamers and esports athletes) and defining them in relation to traditional social media influencers. From there, the authors identify 6 propositions regarding the social networks formed around video game streamers and esports athletes and provide insight into how these networks impact social influence exerted on consumers. Finally, the authors present 8 future research directions, which in combination with the propositions, should meaningfully direct current marketing practice while shaping consumer research's future across multiple domains.

Keywords: video games, digital marketing, influencer marketing, video game streaming

INTRODUCTION

Influencer marketing has quickly become an integral part of modern marketing strategies. With nearly $14 billion spent in 2021 (Influencer Marketing Hub, 2021), influencer marketing has become one of the primary ways by which marketers build relationships with consumers. Recent research in marketing has explored the fundamental features of influencer marketing (Leung, Gu, and Palmatier 2022) as well as influencer and content characteristics (Dost et al. 2018; Hughes et al. 2019; Ki and Kim 2019; Lou and Yuan 2019). However, most marketing research regarding influencer marketing has focused on traditional social media platforms (e.g., Facebook, Twitter, Instagram, etc.) even though a significant portion of influencer marketing occurs on live streaming platforms, such as Twitch, that are dramatically different than these traditional platforms. With nearly 24 billion hours of content watched yearly by 140 million unique consumers (TwitchTracker 2022), there is a need to understand how influencers on these platforms differ from more traditional influencers and how these differences impact consumers downstream. Pair this alongside the rise of the video game ecosystem being used increasingly more as powerful a marketing channel that connect marketers to consumers (Welden, Hewett, and Haenlein, working paper) and there is a clear need to advance our knowledge about how relationships form on these platforms from three separate perspectives: influencer-to-influencer (I2I), influencer-to-consumer (I2C), and consumer-to-consumer (C2C).

This article aims to outline the way influencers and consumers on video game streaming platforms, such as Twitch, build social networks comparative to traditional influencers and offer a set of propositions to start progress toward a more dynamic understanding of influencer marketing on these platforms. We put forward 6 novel and testable propositions illustrating how video game streamers (VGSs) and esports athletes build I2I, I2C, and C2C relationships on video

game streaming platforms while connecting these relationships to marketer-to-consumer interactions. We also outline key downstream consumer effects and suggest avenues for further research to ignite conceptual and empirical explorations in this emerging domain.

DIFFERENCES AMONG TYPES OF DIGITAL INFLUENCERS

Leung, Gu, and Palmatier (2022) define influencer marketing as a strategy in which a firm selects and incentivizes online influencers to engage their followers on social media to leverage those influencer's unique resources to promote the firm's offerings, with the goal of enhancing firm performance. They also presented that influencer marketing creates 4 unique benefits (segment homogeneity, market acceptance, content originality, and consumer trust) alongside two challenges (content control and consumer retention) for firms. Alongside this work, other research in marketing has shown that influencer marketing increases the spread of Word-of-Mouth (WOM) (Haenlein and Libai 2017) and helps drive deeper brand engagement Huges, Swaminathan, and Brooks 2019) among other things.

We propose that current conceptualizations of influencer marketing do not adequately describe what is occurring through video game streaming platforms (VGSPs) for three reasons. First, current frameworks to understand influencer marketing do not consider the influencer-to-influencer networks that form, which produce significant downstream effects on consumers. Second, these frameworks assume that influencer-to-consumer relationships are relatively similar across platforms and do not account for how these relationships change the costs and benefits of leveraging influencer marketing. Finally, these frameworks do not account for the consumer-to-consumer interactions that are created through influencer content.

Influencer Marketing on Traditional Social Media Platforms

Much of the marketing research regarding influencer marketing has been focused on traditional social media platforms, such as Facebook and Twitter. Even though these platforms are some of the largest in terms of size, they have many disadvantages when it comes to influencer marketing. First, these platforms are focused on consumers exchanging information with others, generally communicated through higher levels of text-based content, which leads these platforms to have the least rich content (Haenlein et al. 2020). Along with this, these platforms leveraged offline social relationships to kickstart the formation of online social networks. For example, Instagram initially launched with the model of sharing images with social networks built of mostly offline relationships. Over time though, social media platforms evolved to incorporate content formats that allow for more rich content and more varied social network structures. One example of this is how TikTok leverages short videos to create content with the main function of entertainment of followers, which even Instagram added as a feature to help create more content rich interactions. This switch of focus from delivering information to providing entertainment on social network formation as well. Consumers proceeded to form one-directional relationships with content creators that produced the most engaging content. The most successful content creators amass large followings, which they then monetize through allowing marketers to engage consumers through the influencer they have generated. On these platforms, the main goal of influencers is to generate the largest following of consumers possible to monetize through marketing engagement.

Over the past few years, live streaming platforms, such as Twitch, have skyrocketed in popularity. With over 140 million unique consumers and 24 billion hours of content consumed each year on Twitch, understanding how these platforms differ from traditional social media

platforms is needed for the advancement of consumer and marketing research. These platforms allow for rich content creation and for direct engagement between consumers and content creators through live engagement functions. Alongside this, content on these platforms tend to be created by engaging with other digital experiences, such as video games. This leads to a highly experiential environment that consumers can directly impact through live interaction with the influencer and other consumers co-experiencing the stream (Welden, Hewett, and Haenlein working paper). As a result of these differences, influencer marketing is quite different on these platforms than more traditional social media platforms.

Influencer Marketing through VGSs and Esport Athletes

When compared to influencer marketing on traditional social media platforms, VGSPs Specifically, there are two different categories of influencers on VGSPs: video game streamers (VGSs) and esport athletes. A VGS is a type of digital influencer that uses VGSPs to build a following of consumers around live and interactive content based on video games. Esport athletes, are highly skilled video game players who compete in competitive events that use VGSPs to build a following of consumers to help provide supplemental income. Though on the surface there may seem to be a lot of similarity between the two types of influencers, there are two major differences that separate them from each other.

First, these influencers build their followings with different monetization goals in mind. There are four main ways by which influencers make money through VGSPs: platform rewards, marketing sponsorships, consumer donations, and tournament winnings. *Platform rewards* occur when social media platforms directly pay influencers for the value their follower counts provide, typically through revenue sharing for platform wide advertising revenue.

Marketing sponsorships occur when influencers work directly with marketing firms to advertise their product or service through the influencer's content. *Consumer donations*, which typically do not exist on traditional social media platforms, is a relatively unique phenomenon where influencers actively seek donations from consumers, whether in the form of one time tips or long-term subscriptions. Finally, VGSPs create a centralized arena for video game companies to host massive competitive events that generate large digital followings (e.g., Riot Game's League of Legends 2019 world championships had a larger viewership than that year's Super Bowl [CNBC 2019]). Many highly skilled influencers enter these events for a chance to earn *tournament winnings* which they use as a source of income.

VGSs and esports athletes differ greatly on the way they monetize their content. Typically, VGSs use consumer donations as their main source of income while esports athletes use tournament winnings as their primary income stream. As a result, the consumer and marketer have different roles for each influencer type. For VGSs, they value the consumer experience above everything else, which leads them only to incorporate marketing sponsorships if they do not harm that experience (Welden, Hewett, and Haenlein, working paper), and encourages them to include the absolute minimal amount of platform level advertisements. On the other hand, esports athletes typically already have marketing sponsorships from their successes at tournaments. As such, they tend to build a following on these platforms to fill out the gaps in their income between successful tournaments and to provide a continuous audience for their previously established marketing sponsorships. To do so, esport athletes try to provide value to their consumers through unique information regarding the game they play instead of consumer-centric experiences.

Second, because of the ways in which these influencers monetize their following, they produce content that is remarkably different from each other. VGSs build their content with deep consumer engagement as the main goal. As a result, their content is designed in such a way to allow consumers to directly interact with the influencer in real time, which allows the consumer to feel immersed into the streaming experience (Welden, Hewett, and Haenlein working paper). Also, given the direct interaction with the influencer and the video game in which the content is generated from, consumer experiences with VGSs tend to be high in emotional valence (Welden, Hewett, and Haenlein working paper). On the other hand, esports athletes build content as a secondary goal. Since their focus is doing well in competitive events, they typically turn their practice sessions into consumable content. Because of the high cognitive focus these athletes exert while practicing, their interactions with consumers tend to be less focused on building the experience but providing information to consumers from their expertise.

Because of these differences in content, we see consumers engage with these types of influencers for differing reasons. Typically, consumers who follow VGSs do so because of the experience that is being co-created by the influencer and the consumers who are watching in real time. However, consumers typically follow esports athletes to learn more in-depth knowledge regarding the game that is used to produce content.

SOCIAL NETWORKS AND INFLUENCER MARKETING

It has been widely accepted in consumer research for over three decades that understanding the impact of WOM requires a detailed understanding of the structure of the underlying social network through which the message diffuses (Brown and Reingen 1987; Reingen and Kernan 1986). While recent research has underlined the importance of social network structures for innovation diffusion (Muller and Peres 2019), this point is largely absent in research in influencer

marketing, with the exception of studies that apply social network characteristics (e.g., the number of followers) in firms selection of online influencers (Haenlein et al. 2020; Leung et al. 2022).

Social network structures can be described using global characteristics, which describe the network as a whole, and dyadic characteristics, which apply to pairwise relationships within the network. In addition, while most of the literature on social network analysis assumes undirected networks (see, for example, Haenlein 2013), in the space of social media, it is important to take account of the directionality of influence since connections are often not reciprocal (e.g., an influencer may have millions of followers but only follow several hundred herself). Next, we outline two global characteristics (degree distribution, clustering) and two dyadic ones (tie strength and preferential attachment) on which we focus in our propositions.[5]

Global Network Characteristics – Degree Distribution and Clustering. Degree measures the number of connections a node has within a network. A central network characteristic related to degree distribution is its skewness and specifically its right skew since it reflects the proportion of highly connected nodes or hubs. While the role of hubs in WOM adoption and transmission is not without controversy (Goldenberg et al. 2009; Watts and Dodds 2007), they play a crucial role in influencer marketing since being a hub is often seen as a necessary (although not sufficient) condition to be considered an influencer (Haenlein et al. 2020). Such an approach is consistent with work that has shown a correlation between degree and opinion leader status (Risselada et al. 2016). The other global characteristic of interest, clustering is a measure of transitivity (Granovetter 1973) and is commonly defined through the occurrence of closed triangles (If A is

[5] Reviewing the list of variables discussed by Muller and Peres (2019), we do not include average degree since we are neither interested in network size nor WOM transmission speed. We also do not include assortativity in degree or usage behaviour (see Haenlein and Libai 2013) since this variable is out of scope of the current discussion. The dyadic characteristic embeddedness which has been discussed by Muller and Peres (2019) is conceptually close to preferential attachment/ scaling as we will discuss below.

linked to B and C, how likely is it B and C are also linked?). Clustering is a key characteristic of human social networks, which tend to be small-world networks with a high degree of clustering through which information spreads fast (Watts and Strogatz 1998). Clustering has been considered for a long time as a key driver of WOM effectiveness (Brown and Reingen 1987).

Dyadic Network Characteristics – Tie Strength and Preferential Attachment. Tie strength is among the most widely studied social network characteristics since the seminal work of Granovetter (1973). Tie strength is a measure of time spent with a person and the perceived depth of the relationship (Marsden and Campbell 1984). While WOM transmitted between individuals with strong ties tends to be more credible and impactful, strong tie dyads tend to cluster together, which makes weak ties important for spreading new information across networks.

Preferential attachment is a process that comes into play when new nodes enter an existing network. A network shows preferential attachment when new nodes are more likely to connect with nodes in the existing network who already have many connections. Preferential attachment leads to the emergence of scaling, which, in turn, shapes the degree distribution (Barabasi and Albert 1999). Since, in our case, we are dealing with directed networks, it is important to separate between these two phenomena (preferential attachment vs. scaling) since they provide information on the directionality of the link.

SOCIAL NETWORKS SURROUNDING VGS AND ESPORTS ATHLETES

Understanding how different types of digital influencers build their social networks with other influencers and consumers is essential to expanding the role of marketers within these interactions. This section proposes six propositions covering how I2I, I2C, and C2C relationships form within social networks surrounding VGS and esport athletes. Figure 1 and 2 provide a visual representation of our propositions and the interactions between influencer and consumers.

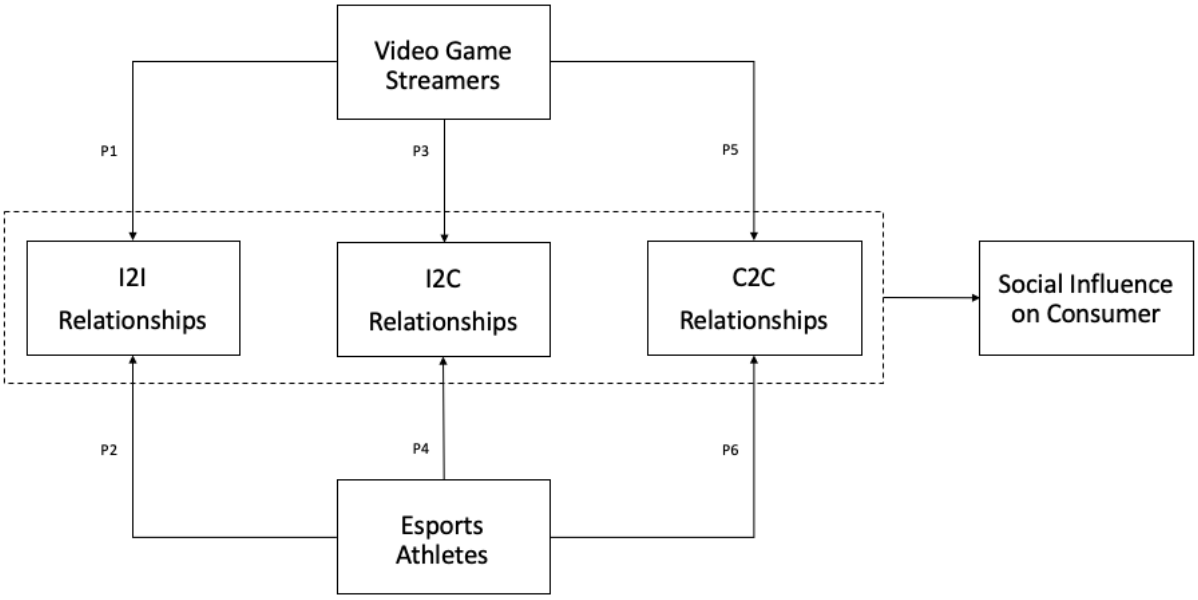
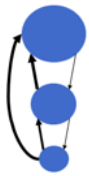
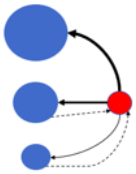
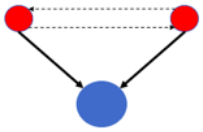
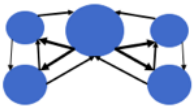
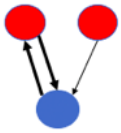
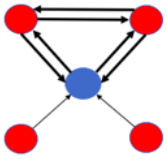
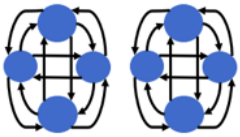
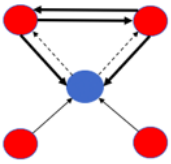


Figure 1: Digital Influencer Type and Social Influence

	Influencer to Influencer (I2I)	Influencer to Consumer (I2C)	Consumer to Consumer (C2C)
Traditional Social Media Influencers			
Video Game Streamers			
Esports Athletes			

* Blue circles represent influencers while red circles represent consumers
* Arrows indicate the relationships formed between two individuals
* Thickness of arrow indicates the tie strength of a relationship

Figure 2: I2I, I2C, and C2C Interactions by Digital Influencer Type

We also highlight the impact these social networks have on social influence exerted on consumers in three ways: consumer learning behaviors, social pressure, and network externalities.

The Impact of Digital Influencer Type on I2I Relationships

Although most marketers are interested in how they can leverage the I2C relationship, one of the most impactful, and understudied, elements of influencer marketing are the I2I relationships. These relationships change the way in which consumer communities form around individual influencers as well as how WOM spreads across networks (Haenlein and Libai 2017). Influencers on traditional social media platforms generally do not build strong relationships with other influencers, as there is no incentive from the platform to do so. Considering the way to maximize monetization on these platforms is to build the largest following possible, there is no platform level incentive for influencers to interact except for smaller influencers trying to leverage larger influencers to gain exposure. However, VGSPs strategically encourage influencers to interact, to the benefit of the platform and some influencers.

One example of this is how VGSs are encouraged by VGSPs to build relationships with other influencers so that they can show their content when the other is offline. Although this is beneficial to the VGSP by keeping consumers engaged even when their favorite VGS is offline, it creates a trade-off decision that VGSs must make. They can expand their reach to differing consumer bases by increasing the level of interaction with other influencers, which increase their chances of having content presented during other VGSs' downtimes.

However, consumers have limited resources, with regards to time to consume content and money to donate to VGSs, and can only meaningfully follow a few VGSs. By interacting with

other influencers, VGCs increase their exposure but risk losing some of their following to other VGCs that their consumers are exposed to.

However, consumers have limited resources, with regards to time to consume content and money to donate to VGSs, and can only meaningfully follow a few VGSs. By interacting with other influencers, VGCs increase their exposure but risk losing some of their following to other VGCs that their consumers are exposed to. Thus, VGCs who have a content creation advantage, whether that is through highly engaged followers (which help create a more exciting social experience) or through additional monetary resources applied to content creation, have the most incentive to build strong connections with other influencers, as they are more likely to add more followers than they would lose to other influencers.

Because of this trade-off decision, we propose that VGSs build social networks that highlight this tension. First, we propose that larger VGSs will be more willing to form relationships with other influencers due to their content creation advantages, leading them to have more degrees of connection within the network. Second, this degree distribution will to groups of VGSs with similar content who cluster together due to these relationships. Third, we believe that tie strengths are not equal directionally between VGCs. Due to the advantage larger VGCs have, through increased revenue and high levels of follower engagement, they are incentivized to create stronger ties with smaller influencer compared to smaller VGSs. Finally, because of the trade-off decisions, there is not a clear advantage for smaller VGSs to attach to larger influencers. Thus, we propose the following VGS I2I relationships:

P1: VGSs build social networks with other streamers with the following characteristics:

i. *Degree distribution directly proportional to their follow size*
ii. *Moderate levels of clustering with influencers with similar content*
iii. *High directed tie strength from larger to smaller influencers and low directed tie strength from smaller to larger influencers*
iv. *Low levels of preferential attachment to other influencers*

Esports athletes, on the other hand, do not experience this trade-off as strongly for multiple reasons. First, esports athletes are more focused on practicing for events than they are with creating the most exciting consumer experience possible, because most their income comes from competitive events. Along with this, most of their following is not built through increased exposure through the VGSP, but is instead built through exposure from these events. To top it off, esports athletes are already incentivized from offline factors to build networks primarily with teammates, so that consumer switching behaviors do not have a significant impact on team income.

Because of these differences, we believe that I2I relationships among esports athletes form differently than other influencers. Specifically, esports athlete I2I relationships have similar degree distribution among all connected athletes, which contributes to high levels of clustering, typically among athletes who belong to the same offline competitive networks. Along with this, these relationships show high levels of bidirectional ties and preferential attachment only occurring with other teammates. The key defining characteristic though is that esports athletes tend to not form meaningful relationships with influencers that are not their offline teammates. Thus, we propose the following esport athlete I2I relationships:

P2: Esports athletes build networks with other athletes with the following characteristics:

- *i. Relatively equal degree distribution among connected influencers*
- *ii. High levels of clustering with athletes who belong to the same competitive team*
- *iii. High bidirectional tie strength*
- *iv. Preferential attachment occurring only with teammates.*

The Impact of Digital Influencer Type on I2C Relationships

From the perspective of marketers, the I2C relationships that form on social media platforms are of utmost importance. Considering marketers leverage the trust built between influencers and consumers to promote their products (Leung, Gu, and Palmatier 2022), understanding how I2C

relationships are formed across platforms is necessary to advance consumer and marketing research. One of the biggest advantages that VGSPs have over traditional social media platforms is that they incentivize influencers to value deep consumer relationships more than large numbers of followers. Because influencers on traditional social media platforms want to build the largest following possible, they do not spend the time to develop direct relationships with consumers. On top of this, the preferred content vehicles on these platforms do not allow for live interaction with consumers, unlike VGSPs. As a result, consumers on this platform tend to attach to larger influencers but do not build bi-directional relationships with them.

Due to VGSPs platform advantages and the monetary need to create dep consumer relationships, VGSs build social networks with consumers that are much different than those found on traditional social media platforms. One of the most important characteristics of VGS I2C relationships is the strong bi-directional ties that are present between VGSs and consumers who directly interact through the streaming experience. As a result, we should expect consumers to preferentially attach to VGSs who create an engaging consumer experience and emphasize direct engagement with consumers during their content creation. Along with this, we should see degree distribution to follow influencer engagement levels and I2C relationships to cluster around consumers who directly interact with the experience, but not with consumers who do not directly interact. Thus, we propose the following VGS I2C relationships:

P3: VGSs build networks with consumers with the following characteristics:

- *i. degree distribution directly proportional to influencer engagement levels*
- *ii. moderate levels of clustering with consumers who directly interact with the streamer through the experience*
- *iii. high bidirectional tie strength with consumers who directly interact with the streamer through the experience and low directed tie strength from consumer to influencer with consumers who do not directly engage with the experience*
- *iv. preferential attachment occurs to streamers who emphasize direct engagement with consumers*

Esports athletes build their relationships with consumers as a mix between VGSs and traditional influencers. Although esports athletes have the platform advantages created by VGSPs, they tend to not prioritize deep consumer relationships when building their networks. In these relationships, esports athletes should have a degree distribution that is proportional to their offline success, as this is the main factor that determines whether consumers follow their content or not. Along with this, we should expect that I2C relationships show high levels of clustering with consumers that are engaging with multiple athletes from the same teams, because of cross exposure created through the I2I relationships among esports athletes. Because esports athletes do not prioritize strong relationships with consumers, we should expect tie strengths that are not bi-directional. Specifically, there should be no relationship from influencer to consumer with consumers who do not interact throughout the streaming experience. However, there will be a weak tie formed from influencer to consumer with consumers who ask informational questions throughout the experience. As a result, these consumers will build a much stronger tie with the influencer than consumers who do not interact. Finally, consumers preferentially attach to athletes who have high levels of offline competitive success and build their content on the sharing of information instead of a deep consumer experience. Thus, we propose the following esports athlete I2C relationships:

P4: Esports athletes build networks with consumers with the following characteristics:

- *i. degree distribution proportional to offline success*
- *ii. high levels of clustering with consumers engaging with multiple athletes from the same teams*
- *iii. varying levels of directional tie strengths from consumer to influencer with little to no directed ties created from influencer to consumer*
- *iv. preferential attachment occurs to athletes who have most competitive success and emphasize content on information sharing*

The Impact of Digital Influencer Type on C2C Relationships

Along with I2I relationships, there has been little marketing research done in the area of C2C relationships that form as a result of influencer marketing. Because influencers on traditional social media platforms value number of followers more than depth of engagement, it is rare for meaningful C2C relationships to form through the conversations surrounding influencer content. However, because VGSPs encourage consumers to directly engage with influencers, it provides increased opportunities for consumers to interact with each other and build meaningful relationships with each other. Not only does this have clear implications for the spread of WOM, but it also should impact the ways in which consumers socially interact with marketing content during the streaming experience.

We expect that consumers following VGSs build strong relationships with other followers compared to the same relationships on traditional social media platforms. Specifically, we expect that consumers who directly engage with the VGS will build networks with other consumers with high degree distribution, clustering, and strong bi-directional tie strengths, if the other consumers also directly engage with the streamer. However, we do not expect meaningful relationships to form with consumers who do not directly engage with the streaming experience. More so, we expect that consumers will preferentially attach themselves to the consumers who are most involved during the streaming experience. Thus, we propose the following VGS C2C relationships:

P5: Consumers following VGSs build networks with other consumers with the following characteristics:

i. high degree distribution surrounding consumers who directly interact with the streamer

ii. high levels of clustering only with consumers who directly interact with the streamer

iii. *strong bi-directional tie strengths between consumers who interact with the streamer and weak or no tie strength between consumers who do not directly interact with the streamer*
iv. *high preferential attachment with the consumers most involved during the streaming experience*

Although C2C relationships through VGSs and esports athletes share many characteristics, we believe there are some important distinctions that make them unique from each other. Specifically, we expect that the consumers most likely to form relationships with other consumers are those who directly engage through the streaming experience with informational conversations. Considering learning from esports athletes is one of the largest reasons for consumer engagement with athletes on Twitch (Hamari et al 2017), it stands to reason that these consumers will also engage more with conversations that encourage learning. As a result, we expect C2C relationships from followers of esports athletes to have high degree distribution, clustering, and preferential attachment with consumers engaged with the streaming experience through informational conversations. Thus, we propose the following esports athletes C2C relationships:

P6: Consumers following esports athletes build networks with other consumers with the following characteristics:

i. *high degree distribution surrounding consumers who directly engage through the experience with informational conversation*
ii. *high levels of clustering only with consumers who directly interact with the experience*
iii. *strong bi-directional tie strengths between consumers who interact with the experience and weak or no tie strength between consumers who do not directly interact with the experience*
iv. *high preferential attachment with the consumers most engaged through the experience with informational conversations*

SOCIAL INFLUENCE ON CONSUMERS

Though there are many consumer implications of varying social network structures across social media platforms, one of the most important from a marketing perspective is how social influence

is exerted on consumers through these digital environments. Specifically, there are three pathways by which marketers leverage the social influence is exerted onto consumers through social networks: consumer learning, social pressure, and network externalities (Muller and Peres 2019).

The first way social networks impact social influence is through consumer learning behaviors. This is a social process through which consumers shape their beliefs regarding marketing content that is dependent upon the consumer's relationship to the information source and the conversations that are driven within the social networks the content is shared through (Acemoglu and Ozdaglar 2011). Considering consumers build stronger relationships with influencers and other consumers on VGSPs compared to traditional platforms, we would expect consumer learning would be stronger on VGSPs due to increased trust in the influencer as well as increased trust in WOM spread through the C2C relationships

Second, we expect that VGSPs apply higher levels of social pressure compared to more traditional social media platforms. Social pressure, which is the distress felt by a consumer when valuable peers have adopted a product that the consumer has not (Van den Bulte and Wuyts 2007), is able to occur more powerfully on VGSPs for three reasons. Considering C2C relationships on VGSPs are much stronger than influencer marketing on traditional platforms, we would expect that social norms are more clearly expressed and more powerfully internalized (Algesheimer, Dholakia, and Herrmann 2005). Along with this, I2C relationships are more often bi-directional on VGSPs which allow for social expectations to be made more clear. On top of this, considering it is known that marketing sponsorships are a portion of income for these influencers, consumers may also feel the need to support the marketer as an expected social norm.

Finally, network externalities, which is the increase in functional utility for marketing content that increases with the number of adopters. Research on network externalities has shown that they are stronger when networks have high levels of clustering, but are negatively correlated with network size and degree distribution (Mukherjee 2014). Though influencers on traditional social media platforms do not meet these requirements, our propositions suggest that VGSs and esports athletes tend to build networks with higher levels of clustering and smaller network size compared to traditional influencers, which should allow more network externalities to occur from a marketing perspective. Though more research needs to be done, we believe that VGSPs can be leveraged early in the product adoption cycle to help with the adoption delay that occurs on more traditional social networks (Goldenberg, Libai, and Muller 2010).

Altogether, between consumer learning behaviors, social pressures, and network externalities, we expect that the I2I, I2C, and C2C relationships on VGSPs provide marketing advantages that cannot be found elsewhere.

FUTURE RESEARCH DIRECTIONS AND CONCLUSION

Influencer marketing and social network formation on VGSPs offer a myriad of avenues for future research. While this manuscript mostly examines social network formation on these platforms, we discuss 8 additional research domains deserving of particular attention.

Consumer Level Research Directions

First, considering the way social network structures on VGSPs create many new interactions and opportunities for consumers to engage with influencers and other consumers, there is a need to understand how the streaming experience is fundamentally different than other types of social media interactions. Recent research has begun to explore this area by trying to understand how video games, which are used to produce content on VGSPs, create unique consumer experiences

which provide powerful opportunities for marketers to interact with consumers (Welden, Hewett, and Haenlein working paper). However, there is a growing need to understand how consumers view streaming platforms in comparison to other content delivery. Specifically, how can consumer actions on VGSPs be measured to be useful for marketers? Do consumers build para-social relationships with influencers differently on VGSPs compared to traditional social media influencers? What determines whether consumers directly engage with influencers on VGSPs? What are the varying types of consumer profiles present on VGSPs?

Second, while research in influencer marketing has explored influencer characteristics in depth, there is little research to show how consumers view different types of influencers and how they are adapting to influencer marketing becoming a more common way for marketers to reach them with content. As such, there is a need for research to understand how consumers are changing with regards to the rise in influencer marketing. How are consumers adapting to the increased presence of influencer marketing? How do consumers cognitively map out the different influencer types across platforms? What do consumer expectations of influencer relations differ on VGSPs compared to traditional social media platforms? Does the increased consumer access to influencers produce any negative externalities that marketers need to consider?

Third, there is already evidence that consumers are starting to naturally segment themselves by the social media platforms they use. For example, there are already noticeable age differences between Facebook users compared to Instagram and TikTok. Along with this, not only is Twitch growing rapidly in the number of consumers on their platform, but they are also seeing the time spent by each consumer skyrocket, with the average consumer spending nearly 2 hours a day consuming content on Twitch (Github 2018). As such, there is a need to understand

how consumers balance their usage of social media platforms and how they make decisions when new options are presented to them. Specifically, how do consumers make the decision to incorporate new social media platforms into their consumption mix? Does a consumer's level of satiation with social media platforms change dependent upon the mix of time that is spent on various platforms?

Marketer Level Research Directions

Fourth, as argued throughout the manuscript, VGSPs offer unique advantages to marketers that are not available on other social media platforms. One area that needs further research is understanding how influencer marketing on VGSPs fit into more broad marketing strategies. How do firms with no knowledge of VGSPs incorporate them into their marketing strategy? How do firms select which types of influencers on these platforms provide the most value? Is it possible that different social media platforms are more effective for various marketing outcomes and if so how should marketers balance their content portfolios?

Fifth, the focus on I2I relationships is an area in marketing research that has been underexplored. Considering the impact these relationships have on consumers, there is a need to understand the formation and downstream effects of these relationships. Specifically, how do I2I relationships impact the spread of online WOM through consumers? How do VGSs accurately determine which influencers to build relationships with? Are there any positioning advantages that marketers can take advantage of through the network clusters that occur because of I2I relationships?

Sixth, it has already been shown that older social media platforms can adapt their content offerings to remain relevant across the years. An example of this includes Instagram changing its core content offerings from pictures to include time sensitive stories (similar to Snapchat) and

short videos (similar to TikTok) in an attempt to take back market share from these companies. Thus, there is a need for further understanding on how the evolutions these platforms go through impact the ways in which marketing content is presented through them. How do consumers balance these content offerings within the same platform? Do these shifts in offerings change the exchange of information and experiences on these platforms?

Societal Impact Research Directions

Seventh, VGSPs offer opportunities to non-profit marketing that go beyond the abilities of other marketing communication channels. Considering monetary donations are already integrated into these relationships, it is likely these platforms impact consumers' attachment to money while also exerting social pressures that are not present on other platforms. Improving our understanding in this arena would be fruitful. Specifically, how do the different social network and platform structures impact the ways in which non-profits build and present marketing content? Do the relationships on VGSPs impact the ways in which consumers view non-profits and the victims that they support?

Finally, Twitch has recently been discovered to be a tool used to spread fake news and disinformation (New York Times 2021). How are the I2C relationships on these platforms being used to spread disinformation? Does the ability for consumers to interact with other consumers within the context of an experience change the credibility of disinformation messages? How do these network structures impact the trust that is built between influencers and consumers?

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VITA

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