Selling Time: Time-Centric Language in Video Game Marketing on Steam

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ABSTRACT

When discussing time spent playing video games, concern and media panic often cloud the perspectives of both developers and players. To develop our understanding of factors that may influence this concern, we examined the presence of time-centric language across the marketing information of 1,000 popular games on Steam, identifying 315 games that communicate temporal aspects in their marketing. Using descriptive statistics and thematic analysis, six themes were identified that communicate temporal aspects ranging from explicit play durations to temporal investment, legacy, and nostalgia. This study contributes to game studies and HCI by providing the first empirical, thematic analysis of time-centric language in video game marketing on Steam. By identifying six thematic patterns which reveal developer practices around temporal communication – while also exploring how such language can shape player motivations – this study opens a new avenue for understanding both developer priorities and player perceptions regarding time in games.

Keywords

Steam, marketing, game development, time, play time, player time, temporal investment

INTRODUCTION

Time in digital play has become mired in fronts of media panic correlating perceived excessive durations of play to internet gaming disorder, pathologic play, and addiction (depending on the discipline and author) (Bodi et al. 2023; Gheţău 2022; Ayenigbara 2018). While this paper does not aim to contribute to reactionary debates, there is a need to better understand how time and temporality in play can serve as a player motivation – in line with existing concepts such as immersion and challenge (Quantic Foundry 2024). In what we believe to be the first study of its kind, this paper turns away from player-focused examinations and instead looks at how time-centric language is used in the marketing of video games on Steam. Where user reviews have

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been extensively studied (Cheuque et al. 2019; Lin et al. 2019), the examination of Steam's marketing strategies is largely limited to commercial discourse (Thorhauge 2022). Rare examinations of Steam have looked at genre popularity (Li 2020) and the prevalence of English and Simplified Chinese language packages in games (Stecuła 2022). However, existing work has not addressed the significance of language presented in game marketing on and beyond Steam. To address this gap, we examined patterns of time-centric language and commercial priorities not considered elsewhere.

This study was governed by three research questions: What commonalities are present in the use of time-centric language in game marketing on Steam? What temporal aspects of play concerning the player's time are communicated on Steam? In what ways might time-centric language in marketing shape player perceptions or motivations? Through the collection of marketing data from 1000 games sorted by user engagement on Steam, this study identified 315 games that communicate temporal aspects in their marketing. From manual thematic analysis of these games, various statistical insights and six themes were identified: *Value Proposition*, *Temporal Highlights*, *Active Support*, *Structured Sessions*, *Anticipated Play*, and *Legacy Engagement*. These themes communicate the potential of temporal investment and link to broader concepts such as legacy and nostalgia. Each theme explores a relationship with player time and can be used to identify priorities in video game marketing. To ground the scope of this study, only time-centric language relating to the passage of the player's time (or real-time) was coded – defined further below. Key findings include an infrequent use of time-centric language that may provoke certain player anxieties about temporal investment, shaping player expectations and cultural identities around play. This is reinforced by developers often communicating only a singular temporal aspect in their marketing rather than presenting a comprehensive temporal experience. These temporal aspects are more likely to appeal through content cycles, linking cost to extended play time, or have vague descriptors (e.g., 'hundreds of hours of gameplay') rather than specific time-related parameters.

This study builds on existing research in game studies and HCI (Zagal & Mateas 2007; Hanson 2018; Rapp 2022), highlighting the underdeveloped application of time and temporality to contemporary player and developer values. Building on this foundation, we provide three key contributions: First, we provide the first empirical, thematic analysis of time-centric language in video game marketing on Steam, offering new insights into how developers communicate temporal values. Second, we reveal patterns in developer practices around temporal communication – including the selective presentation of time-centric information and the prioritisation of certain temporal aspects over others. Third, we highlight the potential impact on players, showing how temporal language may shape motivations, expectations, and anxieties around temporal investment. For industry, these findings offer actionable insights to refine marketing strategies, ensuring that temporal communication aligns with player motivations and expectations.

A BRIEF INTRODUCTION TO PLAY/ER TIME

In this study, we focus on language that intersects with two temporal categories relevant to player time management. The first, *player time*, refers to the time players actively manage in the physical world, aligned with real-world time (this aligns with

Zagal and Mateas' [2010] temporal frame, Real-World Time). Second, *play time* (also *playtime*), the real-world time spent playing (Alvarez Igarzábal 2019), also referred to as event time by Juul (2004). Play time includes both the duration of individual sessions and cumulative time across sessions. We exclude internal game time, such as cooldown timers, day/night cycles, or narrative pacing, which function independently of real-world time (Alvarez Igarzábal 2019; Jayemanne 2020). While acknowledging existing research on in-game temporality, including chronology, mechanics, and narrative structures (Benford et al. 2008; Rapp 2022; Parra Bravo 2023), our study centers on player time to address the media concerns outlined in the introduction. This focus aligns with broader discussions on time scarcity (Kaufman-Scarborough & Lindquist 2003) and socio-cultural constraints, such as Chess's (2016) analysis of feminine leisure time and Goodin et al.'s (2008) concept of discretionary time – time spent outside necessary tasks.

RELATED WORK

Steam

Steam, owned by Valve Corporation, was released in 2003 for the digital retail of video games and now hosts millions of daily users and supplies over 73,000 games (Statista 2024). Steam provides standardised modules of marketing information (see Figure 2 for reference) for the games advertised on the platform. Steam is a key resource for quantitative game studies (Guzsvinecz & Szűcs 2023), offering accessible player and game data via the Steam Application Programming Interface (API) (SteamWorks 2024c)**.** Steam provides developers with a modular template for game sale pages, ensuring a consistent shopping experience and a level playing field, as all developers work within the same structured framework to market their games (SteamWorks 2024a).

Where studies have explored player reviews (Lin et al. 2019), analysed quantitative behavioural data (Sifa et al. 2015), and proposed methods to enhance Steam's recommendation system (Cheuque et al. 2019). While these focuses contribute to understanding player preferences and platform engagement, there is an overemphasis on quantitative methods in data collection and analysis. Although our study centers on marketing information rather than players directly, it remains focused on the qualitative value of language in shaping commercial appeal, as used by game developers to influence player perceptions and engagement. The most comparable work is by Rizani et al. (2023), who collected game-related data to explore correlations between genre, multiplayer capacity, and price. A notable aspect of their research was the analysis of Steam achievements as motivators for engagement. However, there is the presentation of achievements as if they are uniform, despite their potential variation (e.g., some reward progress and gameplay feats while others are time-bound).

Rare, novel studies move beyond player reviews and quantitative data to offer deeper insights into development practices and Steam's platform dynamics. Lin et al. (2016) engaged with the update cycles of games to better understand emerging game maintenance – pulling news and blog data from game pages. Machine learning has been applied to predict platform discounts (Du 2021) and game ratings (Teja et al. 2023), though these studies also provide a quantitative perspective rather than a

qualitative analysis. Stecuła (2024) examined VR genre commonalities using Steam marketing data, including title, release date, tags, language versions, and user review metrics. This focus is still centered on statistical significance, overlooking the qualitative value of the language used throughout. From this observed gap, we believe our study is both novel and the first of its kind to explore the significance of time-centric language, and language more broadly, in game marketing on Steam.

Marketing & Language

In advertising, language holds significant power by shaping perceptions through fostering emotional responses, resonating with targeted demographics, and creating meaningful linguistic associations (Piller 2003, 170; Farrow et al. 2018). While studies have examined game marketing across social media, gaming press, and developer websites, they consistently overlook the role of storefronts in shaping player perceptions (Mathew & Wearn 2016; Wawrowski & Otola 2020). Where the effect of marketing on players has been examined, is through in-game mechanics and content designed to encourage purchases via in-game stores (Hamari and Lehdonvirta 2010). This 'marketing *by* game design' provides valuable insights into how differing levels of temporal investment by players can serve as motivation to purchase skips or boosts. Further relevant examinations look at the marketing of micro-transactions and the concern for player compulsion but similarly, these studies focus on in-game environments rather than the paratextual presentations of game storefronts (Lundy et al. 2024; Zendle et al. 2020; King et al. 2019). This focus arises from the understanding that microtransactions, loot boxes, and other pay-to-win systems (Palmerira 2021), function as harmful mechanisms that pressure players into additional financial engagement or expenditure (Zagal et al. 2013). However, these malicious systems can also create temporal pressures to contest daily routines, decelerate play, and promote the fear of missing out (FOMO) (Freire & Santos 2021). Such as the daily tasks or weekly lockouts in games such as *Destiny 2* (Bungie 2017) and *World of Warcraft* (Blizzard Entertainment 2004). While existing studies focus on harmful financial mechanisms, there is a clear gap in research on systems that influence player time. To address this, we examine time-centric language in game marketing to explore how language may be of significance to players.

Our examination of time-centric language in Steam marketing builds on prior work that analyses the rhetorical dimensions of games and play. Consalvo and Paul (2019) outline the rhetorical significance of language in the development of player cultures. In examining the influence of rhetoric in video games, they applied the concept of constitutive rhetoric to understand game paratexts. Originally coined by White (1985), constitutive rhetoric posits that communication can form a collective identity in an audience based on the narratives or discourse promoted by those in positions of power (Charland 1987). Paul (2009) examined how changes to *World of Warcraft*'s reward system – referred to by developers as 'welfare' rewards – created tensions and associations that impacted player communities. Use of the term 'welfare' in blogs, forums, and other paratexts revealed a disconnect between developers and players, underscoring the influential role of paratexts in shaping player perceptions and experiences. While our study does not employ rhetorical analysis, we acknowledge the frequent use of time-centric language in paratextual discussions across social media, forums, and gaming press – such as the tendency to call out games that 'respect' or 'waste' time (Roberts 2017; San Filippo 2023). This observed

language use provides an opportunity to explore whether temporal dimensions hold emerging or novel value in video game marketing.

Data & Temporal Awareness

Quantified time spent in play has served to benefit game development and academia to better understand player behaviour, pathologic interaction, and inform platform recommendations. Time spent in play is also presented to the player as a tracked metric in various formats (both in-game and on platforms such as Steam's user reviews or the PlayStation 5's dashboard [Robertson 2023]). Hand and Gorea (2018) highlight that temporal data, through personal analytics, aids in negotiating and managing daily schedules and rhythms. Similarly, Whitson (2023), in *Gaming the Quantified Self*, notes that digital systems of play, with their implicit data collection functions, enhance players' awareness and control over their behaviour. While various presentations of play time are observable on Steam (Saaidin & Kasiran 2021), video game marketing and digital storefronts have yet to categorise games using time-centric parameters. Steam does offer a tag system that allows developers and players to assign brief descriptors to games, enhancing discoverability and communication of game aspects. However, this system (out of four hundred and fifty-one tags) only has one of temporal significance, 'short', that is currently applied to 2260 titles registered on Steam (SteamDB 2024). While our focus is not on the tracked player time available on Steam, we acknowledge the value of accessible presentations of temporal information. From this, we draw a connection between advertised play durations and player benefit toward time management.

While media panic around video games and addiction echo concerns regarding social media doom-scrolling (Buchanan et al. 2021), there is a notable disconnect from historical anxieties surrounding broadcast or recorded screen time. Unlike vague concerns about TV addiction (addressed in both media and psychology research [Sussman & Moran 2013; Horvath 2004), video games have been formally linked to disorders, such as Internet Gaming Disorder (IGD) (American Psychiatric Association 2013) and Gaming Disorder (World Health Organization 2024) – though these still require further evaluation (Darvesh et al. 2020). The interactive nature of digital play sets video games apart from traditional media, but does this alone justify the formalisation of gaming addiction as a disorder? Another distinction lies in how traditional media and video games communicate engagement time. Media like cinema, DVDs, and subscription services often specify viewing lengths (see Figure 1), providing clear expectations for users, a practice less common in video game marketing despite its potential to inform player engagement.

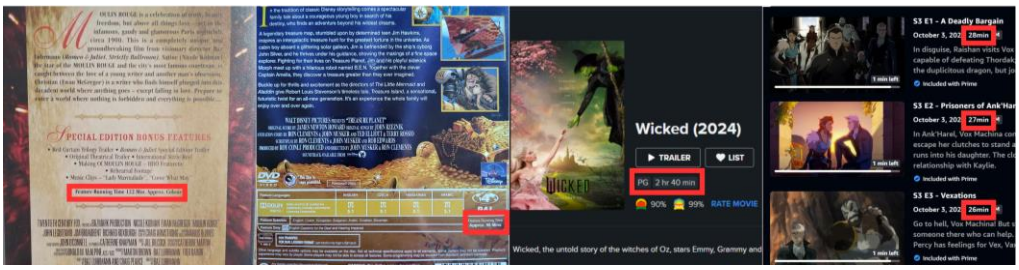

Figure 1: Media runtime information across formats. From top left to right: *Moulin Rouge* (VHS), *Treasure Planet* (DVD), a cinema booking page for *Wicked* (source: Fandango), and Episodes of *Vox Machina* (Prime Video) – text content not relevant.

There is also the standardised presence of approximate play length in traditional table-top games via an efficient infographic. Whereas video games currently lack an official method for communicating play length, there appears to be little effort from game studios, publishers, or regulatory bodies to develop one. The exception to this lack of temporal communication seems to be the Microsoft design team for the Xbox app on PC who recently included a third-party, play time aggregator in their game storefront (Beaumont 2023). This third-party service, 'HowLongToBeat' (2024) is an aggregated play length and completion platform that reliably communicates various temporal lengths of play across different play styles (completionist, speedrun, etc.) in an easy-to-consume manner. The significance of this inclusion shows a distinct industry shift in communicating temporal parameters of digital experiences to motivate audience engagement, a shift that provokes further investigation.

Summary & Research Gap

Despite extensive research on player behaviours, marketing dynamics, and temporal aspects of video games, there is a notable gap in examining the qualitative use of time-centric language in digital storefronts like Steam. While prior studies have focused on quantitative analysis or in-game systems, the broader implications of marketing language on player expectations and engagement remain underexplored. This study addresses this gap by critically evaluating how time-centric language is employed in game marketing, aiming to uncover its role in shaping perceptions of play and influencing player behaviour.

METHODOLOGY

This research took an exploratory approach to assess the use of time-centric language in video game marketing on Steam. A sample of 1,000 games was collected in a single instance on the 6th of December 2023 based on Steam's 'relevance' filter, which reflects organic visibility. Organic visibility on Steam refers to how games gain visibility through user engagement rather than paid advertising (Peterson 2023). As users purchase, review, and interact with games, Steam's algorithms respond automatically to player interest – promoting these titles more widely (Steamworks 2024b). This process is operationalised in the Steam platform's 'relevance' filter, which sorts games by organic visibility based on user engagement metrics. By selecting games using the 'relevance' filter, this study directly captures the effects of this process, ensuring the sample reflects contemporary marketing practices of popular games.

Data Collection & Sample

After evaluating other digital game stores (e.g., Epic Games Store, PS Store, Xbox Marketplace), Steam was chosen for its ease of data access and relevance to industry studies. Data was collected using Python packages in Google Colaboratory (2024) via the Steam API. 'steam-review-scraper 0.10' (Zhu 2021) was used to obtain the Steam ID (the unique serial code for each game) of the top games ordered by 'relevance' (user engagement with) at the time of collection. Marketing information was collected by integrating these IDs into existing Python code from Davis (2019), with minor corrections by ChatGPT-4 (2024) to ensure functionality in Google Colaboratory. The code used is well-documented, previously verified, and has been successfully applied in other data collection studies (Davis 2019). Spot checks were conducted across game pages to provide additional verification of data collection.

The ‘relevance’ filter, based on user engagement with Steam pages, was selected over ‘new releases’ or ‘top sellers’ to capture a diverse range of games reflecting current player preferences. A target of 1,000 games was collected to ensure diversity, covering various genres, popularity levels, and developer types. The marketing data was collected from three sources on each Steam game page (see Figure 2); the ‘Short Description’ (A), the ‘Reviews’ (B), and ‘About the Game’ (C). The ‘Reviews’ section (B) primarily held industry comments from sources such as IGN (2024) or Destructoid (2024) but occasionally user reviews. Out of the 1000 games collected, there were five unreleased games such as *Dragon’s Dogma 2* (Capcom 2024) which were included for their marketing data as unique, novel, and outlier data were desired as part of this exploratory approach.

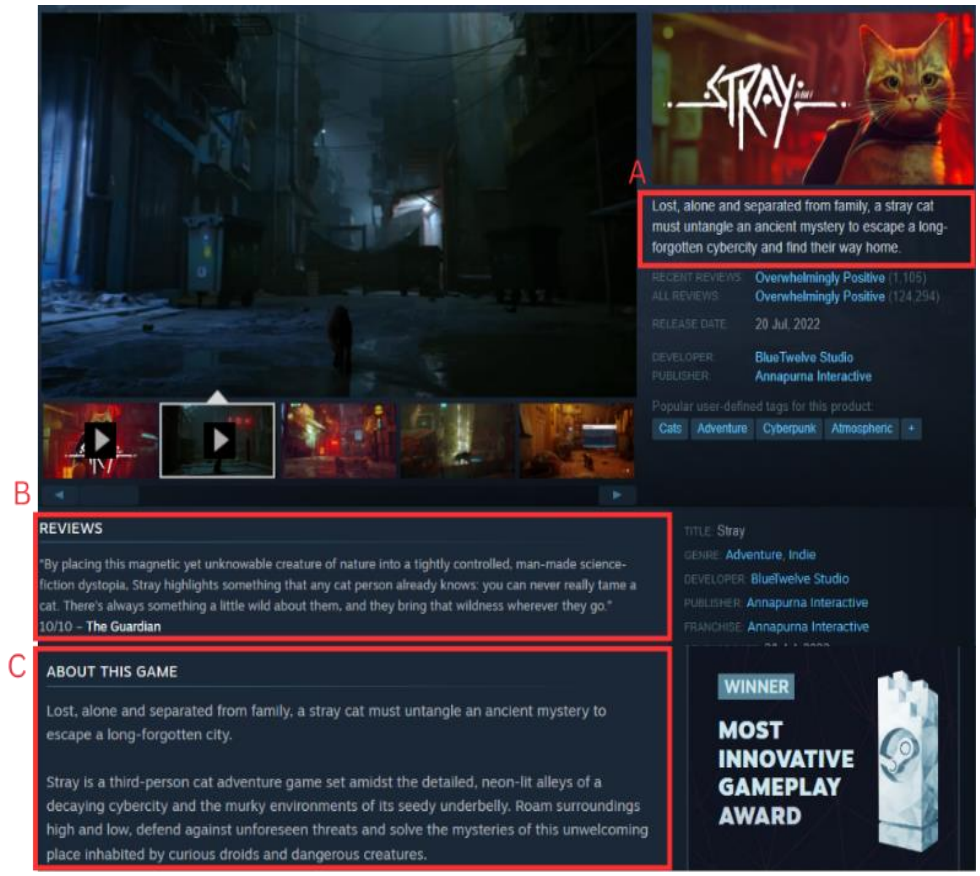

Figure 2: The three sections of collected marketing – text content not relevant – on *Stray*’s (BlueTwelve Studio 2022) (edited) Steam page.

Filtering the Data

To identify time-centric language in Steam marketing data, a keyword filter was developed using an abductive, multi-phase process. General terms such as ‘hour,’ ‘day,’ and ‘minute’ were identified to represent temporal units and then vetted based on their usage in player communities, social media, and gaming press. This vetting process, in turn, revealed culturally appropriate keywords like ‘short,’ ‘long,’ and ‘session.’ A review of Steam-specific terminology added less common but consistent terms, such as ‘roadmap’ and ‘season’. This abductive approach uncovered connections not immediately evident through deductive reasoning (Meyer & Lunnay 2013). The keywords were then categorised into three representative groups – *Time Units & Frequencies* (‘hour’), *Durations & Length* (‘short’), and *Game-Specific*

('season') – to explore whether novel insights could be identified. The final filter of 37 keywords (see Table 1) was designed to capture a representative but not total sample of time-centric language for our exploratory qualitative analysis.

Time Units & Frequencies	Duration & Length	Game-Specific
second, seconds	short	play time, player time, playtime
minute, minutes	long	limited time
hour, hours, hourly	length, lengths, lengthy	roadmap, road map
day, days, daily	session, sessions	season, seasons, seasonal
week, weeks, weekly		
month, months, monthly		
quarterly		
year, years, yearly		
annual		

Table 1: Time-centric keywords used for data sorting.

ANALYSIS

Our analytic approach was based on Fereday and Muir-Cochran's (2006) thematic methodology which had been directly applied to game studies previously (Byers & Nansen 2024). This methodology uses a priori template to organise data for coding (Crabtree & Miller, 1992) – in our case a keyword filter. Analysis began by using the keyword filter to identify time-centric language via text queries in NVivo 14 (2024). The first author then manually reviewed each result, familiarising themselves with the data set and established codes through thorough reading and rereading of the data. This process was conducted manually to better observe emerging trends, noting time-centric language is present but not common enough for automation. Themes were developed to be "representative of the initial data analysis and assigned codes" (Fereday & Muir-Cochran 2006, 90). Finalising the themes involved collective input and a detailed review process carried out by all authors during the analysis period.

Thematic analysis resulted in the development of six themes that came to categorise the presentation of time-centric language across marketing information. These themes were *Value Proposition*, *Temporal Highlights*, *Active Support*, *Structured Sessions*, *Anticipated Play*, and *Legacy Engagement* which will be discussed in the following sections. Only time-centric language indicating an impact on player time or play time was included, while references to game time (e.g., day/night cycles) were excluded. Narrative, conversational, or hyperbolic language (e.g., 'best game in years') was also omitted unless it conveyed a temporal value (e.g., 'hundreds of hours of content'). Other word use such as the term 'roadmap' which can be used in racing games to refer to physical tracks rather than development plans were also excluded. Keywords in game names and developer information were also ignored. Descriptive statistics are used to identify quantitative patterns to inform qualitative discussion rather than inferential statistics (Kaur et al. 2018).

Statistical Insights

The keyword search identified 1,897 uses of time-centric language in the marketing data, but manual review found only 739 instances across 315 of the 1,000 games that specifically communicated an impact on player time. Time-centric language was predominantly found in the 'About The Game' section, with 684 occurrences. This suggests that the detailed description, which provides a broader context for gameplay mechanics and player experience, is the primary space where temporal aspects are communicated. In contrast, the 'Short Description' section, which is typically the first thing a player sees, contained 28 instances. While infrequent, this may imply that these developers valued communicating a temporal aspect upfront to capture player interest. Only 27 instances were found in the 'Reviews' section, which is again infrequent. It is notable though that these developers selected and presented an evaluation of a temporal aspect of their game, to communicate commercial appeal to the player.

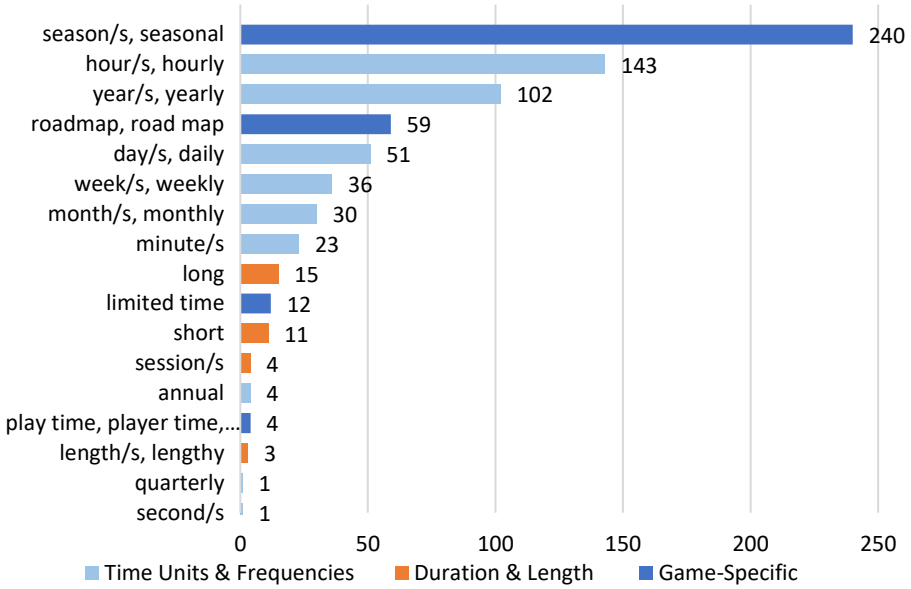

Figure 3: Keyword frequency across marketing data on Steam.

Figure 3 highlights a strong preference for language that communicates *Time Units & Frequencies*, with terms like 'hour/s' (143) and 'year/s' (102) being highly used. While these standard temporal markers are easily understood by players, their context often obscures the actual temporal investment required, using phrases such as 'hours of fun' or 'years of content.' This aligns with the lower use of more general terms that describe *Duration & Length* like 'short' (11) and 'long,' (15) which, while less precise than 'minute/s' (23) or 'week/s,' (36) can provide more transparent communication of play length. The dominant use of the *Game-Specific* terms 'season/s' (204) underscores the strong presence of seasonality and time-gated content in marketing language, and the prevalence of season-based structures in popular games. Terms such as 'roadmap' (59) and 'playtime' (4) indicate a selective focus on game mechanics and planned updates rather than a direct connection to player time – aligning with the broader trend of limited explicit communication regarding temporal investment. Lastly, minimally used terms like 'quarterly' (1) and 'second/s' (1) may simply be too granular, misaligned with current marketing strategies, or less relevant to player engagement. Overall, this distribution reflects an uneven integration of temporal

language in game design and marketing. The combination of standard time units, durations, and game-specific descriptors provides insight into how time is framed and communicated in video game marketing, influencing both player experience and engagement strategies.

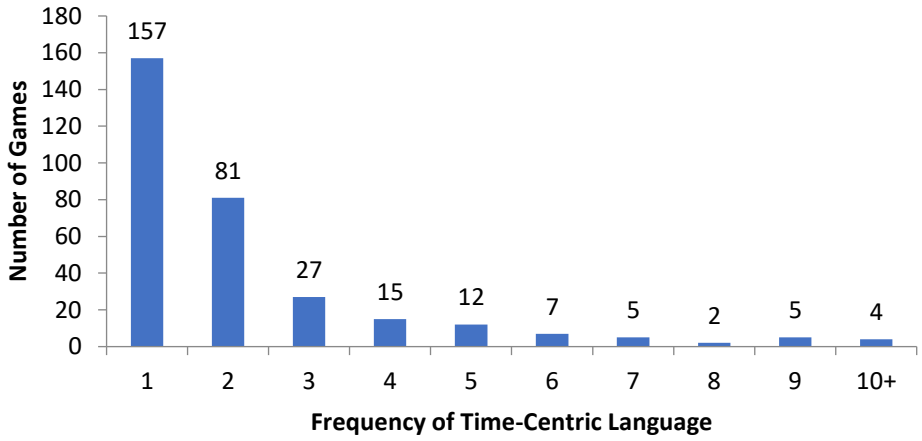

Figure 4: Histogram of time-centric language use in game marketing on Steam.

In Figure 4 we further inspect the infrequency of time-centric language across games, revealing that most game pages (157) only displayed a single use of time-centric language relevant to player time. This reinforced that time-centric language is not deeply integrated into game descriptions or marketing for the majority of titles, supporting the observation that it remains an emerging rather than standardised practice. Noting *iRacing* (iRacing.com Motorsport Simulations 2008) as an outlier (46 instances, due to detailed mentions of seasons, updates, and play lengths), the number of games using time-centric language more than once is rare, with 81 games using two terms and very few (4) using more than ten. This suggests that developers tend to focus on a single time-related aspect rather than communicating a comprehensive temporal experience. The rare use of temporal language highlights that only a small subset of games emphasise the relation between play and time, further reinforcing the uneven integration of time-centric language in video game marketing.

Themes

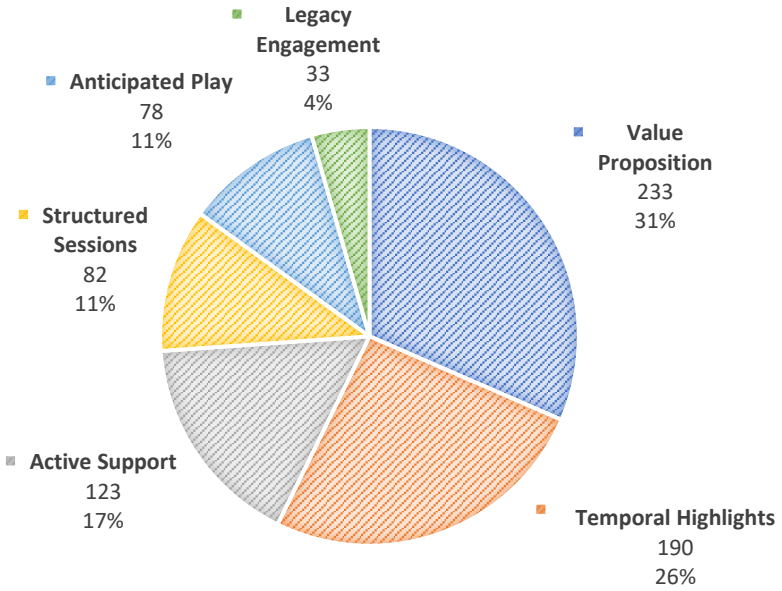

Figure 5: Distribution of themes across games with time-centric language in their marketing.

Value Proposition

First, most frequent (see Figure 5), and unsurprising, the use of time-centric language that related cost to time in play was coded to the *Value Proposition* theme. The language in this theme references paid, time-limited elements and frequently contained keywords like 'season/s, seasonal' in marketing materials to link costs to future or recurring content. *Value Proposition* time-centric language use was notably clear and transaction-focused.

> *"This subscription will be available on 18 March 2021 for $4.99/£3.99/€4.99 per month. This subscription will automatically renew at the end of every month until it is cancelled." Europa Universalis IV* (Paradox Development Studio 2013).

Value Proposition language creates a financial value for temporal investment that appeals to players willing to invest in a game's base, modified, or extended experience. This is seen across games like *Lords of the Fallen* (Hexworks 2023), which advertises a seasonal (yearly) pass in its premium edition, to build commercial appeal for the more expensive bundle by advertising future temporal investment. This is a practice repeated across many games on the Steam platform and elsewhere. This theme focused only on paid content with a clear temporal link to player time, such as Limited-time events (e.g. Halloween), early access, or progress modifications (e.g. double experience weeks).

Temporal Highlights

The *Temporal Highlights* theme outlined new missions, quests, and other in-game experiences either already accessible, soon to be available, or established through trust and regularity. *Temporal Highlights* language covers updates and additions to

the game that occur within temporal units such as 'week/s, weekly' and 'month/s, monthly,' – used to provide a clear content schedule to the player. This theme appeals to players by promising more value through ongoing content delivery. A sub-theme emerged that advertised daily and weekly activities with a competitive focus. This was communicated as scheduled game events of heightened or spotlighted competition for players to climb leaderboards and beat their peers.

> *"…[B]oost your leaderboard rank as you dominate opponents during intense two-month seasons." Forts* (EarthWork Games 2017).

> *"…[R]ace the entire DiRT Community in Daily, Weekly and Monthly Challenges, with worldwide leaderboards and events." DiRT Rally 2.0* (Codemasters 2019).

The *Temporal Highlights* theme presents players with two contrasting influences. A positive interpretation offers more effective player time management through awareness of content structures. On the negative side, the calendar of events can evoke FOMO, encouraging players to stay active to avoid missing limited-time opportunities and leaderboard achievements.

Active Support

Active Support language relates to commitments from game developers to the game over time. It encompasses discussions about the developers' design choices and game management, communicated through devlogs and updates released on a 'week/s, weekly' or 'month/s, monthly' schedule. Of the 48 games where 'roadmap, road map' was mentioned, only two are recognised as AAA (from high-budget development teams) such as *Dying Light 2 Stay Human* (Techland 2022) and *Sniper Elite 5* (Rebellion Developments 2022). The other 46 games such as *Cult of the Lamb* (Massive Monster 2022) were from independent developers.

> *"If you're curious about the direction we're aiming for, be sure to go check out our roadmap and our development vlogs to keep updated on what we are working on!" ASTRONEER* (System Era Softworks 2016).

This theme was predominately used by indie games such as *The Long Dark* (Hinterland Studio 2014) to facilitate direct communication between developers and players, to foster communities. Other games with ongoing development also used this theme to maintain community standards.

> *"With over 17 years of active development and free expansions, EVE is one of the longest running space MMOs out there." EVE Online* (CCP Games 2003).

Through this theme, developers aim to build relationships with players, making them aware of the temporal commitments and costs inherent in game design, while emphasising that the experience will evolve and be maintained over time.

Structured Sessions

Structured Sessions language uses time units and frequencies to communicate play length and provides players with a clear understanding of time commitments. This explicit communication was notably rare, unlike previous media and play marketing information. This theme addressed the duration of a single match (e.g., 15 minutes) or the total hours of gameplay (e.g., 500 hours). *Structured Sessions* language helps players understand the time commitment required for different aspects of the game. This theme was predominantly seen in sports games that clearly communicate the intervals of play and lengths of certain events.

> *"A Blancpain GT Series Sprint Cup event consists of two races of one hour each, while the Blancpain GT Series Endurance Cup races range from three-hour events through a 1000 km race to the season highlight of the Total 24 Hours of Spa, one of the world's leading 24-hour races." Assetto Corsa Competizione's* (Kunos Simulazioni 2019).

The use of time-centric language to clearly communicate the full or approximate length of play was surprisingly minimal across the entire data set. When present in narrative or singleplayer games, references to play duration typically focused on additional content rather than the base game, such as announcing "around 30 hours" of additional content in the *Sea of Thieves: A Pirate's Life* [Rare 2018) downloadable content (DLC).

Anticipated Play

The *Anticipated Play* theme reflects the use of vague or undefined temporal language, relying on general terms and open-ended statements to create anticipation for future investment. This was another low-frequency theme in the use of general temporal units ('week/s, weekly' and 'year/s, yearly'), investment, or otherwise identified temporal aspects without providing specific details.

> *"Hundreds of hours of gameplay await you at the dawn of a new era." Total War: WARHAMMER* (Creative Assembly 2016).

Anticipated Play language leaves room for interpretation and can be used to create anticipation but also to hide temporal parameters. This veiled time commitment was frequently used by live-service, subscription-based games.

> *"Or test your team's skill with countless hours of raid progression – the ultimate challenge for any fireteam." Destiny 2.*

The use of *Anticipated Play* language may speak to both a deeper understanding of what players want to see but also reflect a marketing safeguard as developers arrange on the fly what future content may be.

Legacy Engagement

Finally, the *Legacy Engagement* theme represents the outliers of time-centric language, linked by retroactive elements such as termination, legacy, and reflection.

Termination or conclusion was included in this theme, reflecting unique points of gratitude and reflection.

> *"As of December 4, 2016, the online services portion of Batman: Arkham Origins will be retired. We thank those that have joined us to battle over the last 3 years." Batman: Arkham Origins* (WB Games Montréal 2013).

This theme includes *Spiritfarer*'s (Thunder Lotus Games 2020) final update announcement and the expiration of premium currency in *Apex Legends* (Respawn Entertainment 2019). The *Legacy Engagement* theme also includes the use of legacy in advertising such as *Resident Evil 7* (Capcom 2017) which announces its role in setting the standard of horror gaming for over 20 years. *Legacy Engagement* language was identified to refer to the history of the franchise, acknowledging its evolution and termination, and was the least common theme seen throughout the marketing data. The language surrounding *Legacy Engagement* uses of time-centric language tended to be celebratory of time passed or used to communicate finality.

> *"For more than 10 years, players have been able to live out their own STAR WARS stories" STAR WARS™: The Old Republic™* (BioWare Austin 2011).

> *"face the astonishing conclusion to a story 20 years in the making!" GUILTY GEAR -STRIVE-* (Arc System Works 2021).

More so than other themes, *Legacy Engagement* language came from established, older games that appeared to use language to evoke both nostalgia and appeal to new players through reflective framing of most keywords.

DISCUSSION

This discussion highlights three key contributions of this study: (1) the first empirical thematic analysis of time-centric language in video game marketing on Steam; (2) insights into developer practices regarding temporal communication; and (3) the potential impact of time-centric language on players' motivations, expectations, and anxieties. From across the marketing data, clear patterns of time-centric language use were identified that related temporal dimensions and concepts to the themes of *Value Proposition*, *Temporal Highlights*, *Active Support*, *Structured Sessions*, *Anticipated Play*, and *Legacy Engagement*. The marketing data revealed that just under a third of the games ranked by 'relevance' on Steam include time-centric language that connects to player time. Statistical insights reveal that games rarely use more than one or two time-centric terms relating to player time, suggesting developers emphasise only a single time-related aspect in marketing. Time-centric language is often highlighted in the 'About the Game' section, though a smaller number of developers also prioritise these aspects in the 'Short Description' and 'Reviews.' This suggests that time-centric marketing may be subjective, context-dependent, and influenced by development processes, in turn contributing to the lack of standardisation. The observed commonalities highlight different priorities in marketing appeal and player interaction, connecting time-centric language to various aspects of player time. These strategies shape not only the awareness of temporal commitments but also player motivations – encouraging engagement through anticipation, competitive drive, and the promise of regular updates. These include

time in play relative to cost (*Value Proposition*), scheduled content (*Temporal Highlights*), developer engagement over time (*Active Support*), infrequent transparency around explicit play length (*Structured Sessions*), vague parameters for temporal investment (*Anticipated Play*), and termination, legacy, and past success (*Legacy Engagement*).

As Zackariasson and Wilson (2012) note, the video game industry is known for evolution, adaptation, and the development of new practices. Marketing reflects this trend, as while the standardisation of time-centric language remains underdeveloped, its presence is consistent. This suggests that individual developers are using time-centric language to connect with players and communicate the temporal dimensions of their games. While this commonality might align with Lipkin's (2013) concern for the demise of Indie culture through homogenisation, it could also represent a more grounded and player-focused approach to game design – one that values and respects player time by proactively communicating temporal aspects.

The identified themes capture the different ways that marketing materials communicate temporal aspects related to player time. Not only are play durations (*Structured Sessions*) communicated, but potentials of temporal investment (*Anticipated Play*), and schedules of content and availability (*Temporal Highlights*). Yet a preference for alluding to future content and paid extensions seems preferred over an explicit approximation of play length. The *Structured Sessions* theme is consistently underutilised, appearing primarily in discussions of additional content (DLC). Despite being less frequent than the *Anticipated Play* theme, it often addresses only a small portion of the overall play length, failing to communicate a full approximate engagement time. This may speak to a marketing or game development norm to quantify additional content experiences temporally and base games spatially (levels, areas, sequences, endings, etc.). This practice would reflect a strategic approach to player engagement, appealing to untapped audiences with the mystery of new, spatial experiences in base games, and quantified, temporal expectations of longevity in additional content for returning players.

Lastly, we sought to understand the potential impact of this temporal communication on players. Returning to concepts of quantified self and play, Hand and Gorea (2018) note that temporal data assists in negotiating and managing time scarcity and scheduling. *Temporal Highlights* appeal to players through marketing by establishing a calendar of content or a schedule for players to situate their availability to play within – while also creating pressure to experience content that could be missed (Freire & Santos 2021). Such language strategies also tap into players' intrinsic motivations, such as achievement, mastery, and social belonging, aligning with broader player engagement models (Quantic Foundry 2024). Similarly, time-centric language was not explicitly connected to systems that could easily be defined as malicious mechanisms, such as those identified by Zagal et al. (2013). *Value Proposition* language use was consistent but retail-oriented, clearly linking price to content without language that seemed to target or compel the player. However, there may be more weight to what the marketing information did *not* show. *Destiny 2* used language suggesting free access to a constantly evolving game but avoided linking paid content directly to player time – despite having numerous tiers of content connected to paid thresholds and time-gates. There is also an odd focus in *Baldur's Gate 3* (Larian Studios 2023), which highlights 174 hours of cinematics rather than explicit temporal

parameters of play. Temporal aspects are present, but decisions are made not to include comprehensive, player-benefiting details. In the infrequent use of the *Legacy Engagement* theme, we see an attempt to use nostalgia and legacy to motivate player behaviour (Makai 2018). This communicates an understanding of player motivation in older players and the value games hold over time, appealing to new generations to sustain engagement.

There is a notable failure to communicate the play length of games by developers through marketing. It could be speculated that developers refrain from communicating play length in marketing because doing so might limit the perceived value or flexibility of their games. Unlike fixed-length media like VHS, DVDs, or cinema, video games often rely on ongoing content updates to maintain player engagement and foster long-term retention. By focusing on temporal structures such as weekly or monthly updates, developers may intentionally avoid setting expectations around play length, allowing them to appeal to a broader audience with varying play styles and time commitments. Additionally, vague or open-ended descriptions of content may leave room for players to project their own expectations, enhancing the game's commercial appeal.

The results of this study highlight a notable absence of temporal parameters communicated to players through game marketing. Building on the significance of rhetoric from game paratexts (Consalvo & Paul 2019) this lack of communication may contribute to concerns among players and caregivers. Media panic and reactive debates about time spent in play could stem from a lack of awareness, driven by the underdeveloped temporal communication in game marketing – a standardised feature in other media and play systems. The way players incorporate video game play into their daily, weekly, or life cycles can establish new temporal patterns, with difficulties in managing this potentially leading to anxieties. Time scarcity is a significant source of anxiety (Kaufman-Scarborough & Lindquist 2003), and by communicating temporal parameters, players can better integrate play into broader temporal pressures and schedules. This aligns with Goodin et al.'s (2008) emphasis on the importance of discretionary time – free time beyond work, personal care, and unpaid labour – as essential for well-being. While the advertisement of play length does not directly depict self-tracked data tied to the quantified self, knowledge of certain temporal parameters – such as play length, match length, and frequencies – acts as a framework to help players better manage their time and engagement.

While prior research has provided substantial insights into the Steam platform (Rizani et al. 2023; Lin et al. 2016; Sifa et al. 2015) there remains a significant gap in understanding how developers use language in marketing. This study targeted time-centric language in game marketing to address this gap. Further, the methodology was selected to complement existing studies that focused on quantitative data, sidelining the qualitative value of how language shapes commercial appeal and player engagement. Our exploratory investigation addresses this gap by forging a novel approach to examine developer practices through thematic analysis and descriptive statistics of time-centric keywords in game marketing on Steam. This study offers implications not only for Steam but for digital retail platforms broadly, proposing that the inclusion of structured time-centric information in game marketing – matching the practices of historic media such as VHS and DVDs – could enhance transparency

and better align with evolving player expectations for informed temporal engagement. Overall, these findings underscore the importance of understanding how time-centric language in marketing shapes both developer strategies and player experiences, paving the way for more transparent, ethical communication in game marketing. We end our discussion with a call to action for future work to examine video game marketing on retail platforms further.

LIMITATIONS AND FUTURE WORK

This study examined time-centric language in Steam game marketing using descriptive statistics and thematic analysis, but several limitations exist. The qualitative approach, while complementing quantitative research, limits direct comparisons with such studies. The broad game sample provides a foundation for refinement in future mixed-methods research. Focusing solely on English-language data introduces regional bias and may overlook multimedia time-centric descriptors. Additionally, the reliance on language presence or absence highlights implications rather than causal effects. Subjective coding, though collaboratively developed, may differ from insights other researchers might uncover.

The literature review highlights a critical gap in understanding how games are marketed on digital storefronts, despite extensive research on other media channels. Digital platforms play a pivotal role in conveying the commercial appeal of video games, yet the marketing priorities and strategies of developers remain underexplored. To advance this topic, we recommend conducting direct interviews with game studios of varying sizes. This approach would offer valuable insights into industry perspectives on time and temporality, revealing how these concepts are integrated into organisational practices and design strategies.

CONCLUSION

Video games are embedded in our daily lives yet our understanding of how developers communicate temporal aspects through marketing – and how this shapes player motivations – remains underexplored. While quantitative studies have often examined time in play, they rarely address how temporal language in marketing reflects developer priorities or omissions that could influence player engagement. This study fills this gap by thematically analysing time-centric language in Steam marketing, revealing six key themes that highlight how time is communicated – or neglected – in promotional text which in turn shapes player motivations and expectations. By examining temporal concepts in video games – through system design, marketing, and user engagement we can deepen our understanding of how digital play is valued. Our findings show that developers frequently emphasise singular temporal aspects rather than presenting comprehensive information about temporal investment. This omission may affect players' expectations and motivations, shaping how they manage their time and engage with games. Rather than offering prescriptive recommendations, we highlight how these marketing practices can impact player perceptions, potentially fostering anxieties about investment or shaping motivations to engage. This study not only clarifies developer priorities in temporal communication but also highlights the potential impact of this language on players' motivations to engage, extending implications for game studies, HCI, and industry practices alike.

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