

# Digital co-waiting: humour, camaraderie and emotional flux during Fortnite's Black Hole event

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## Abstract

**Purpose** – This paper aims to examine the emotional dynamics of digital co-waiting during the Fortnite Black Hole event, where players collectively endured 37 h of suspended gameplay. It reframes consumer waiting as a socially enriched and emotionally generative experience rather than a passive, individual frustration.

**Design/methodology/approach** – The study adopts a multimethod approach, integrating constructivist grounded theory with computational sentiment analysis of chat messages captured from YouTube livestreams. Data was analysed using open, axial and selective coding to identify emotional responses, while sentiment trajectory analysis was used to track affective fluctuations across time.

**Findings** – The analysis reveals that digital waiting is an oscillatory emotional process. Rather than a linear decline in satisfaction, it encompasses humour, speculation, impatience, distraction and community bonding. Emotions fluctuated over time, with humour and shared uncertainty acting as buffers, suggesting that waiting can be affectively generative when experienced in co-present digital spaces.

**Research limitations/implications** – The findings are based on an exceptional event, limiting their generalisability. Future studies should explore digital co-waiting in broader contexts to refine the framework.

**Practical implications** – The study highlights opportunities for designing digital waiting experiences that leverage social interaction and affective engagement, turning waiting into a value-creating experience.

**Originality/value** – To the best of the authors' knowledge, this study is among the first to examine prolonged, synchronous consumer waiting in digitally mediated environments. By introducing the concept of digital co-waiting, it redefines waiting as a performative, affectively complex practice, challenging traditional models that emphasise duration and individual dissatisfaction.

**Keywords** Digital co-waiting, Digital economy, Emotions, Internet, Qualitative research

**Paper type** Research paper

## 1. Introduction

Waiting has long preoccupied researchers across services marketing, operations and consumer behaviour, emerging as one of the most persistent concerns in service delivery over the past four decades (Hornik, 1984; Taylor, 1995). Waiting is framed primarily as a source of dissatisfaction, anxiety and service failure (Maister, 1985; Xu *et al.*, 2018). The rise of technology-driven, instant-access services such as Amazon Prime, Uber and Spotify has only sharpened this imperative, reinforcing a cultural demand for immediacy and intensifying intolerance for delay (Buhalis and Sinarta, 2019; Wang *et al.*, 2022). Within this landscape, a dominant model still persists: waiting is inherently negative, and the longer it continues, the more negative its consequences. This approach underpins most empirical studies, which tend to focus on short waits, individual consumers and linear declines in satisfaction over time (Friman, 2010; Noone and Lin, 2024). The goal, accordingly, is not to understand waiting, but to eliminate it.

Yet a growing body of research suggests that this narrative may be incomplete. Under certain conditions, waiting can be

socially meaningful, emotionally generative and even positively evaluated (Giebelhausen *et al.*, 2011; Kremer and Debo, 2016; Ryan *et al.*, 2018). There is evidence that waiting can signal status, foster community and enhance perceived value (Ülkü *et al.*, 2022). This study contributes to that shift by examining a real-time, long-duration digital co-waiting event: the Fortnite Black Hole. For 37 h, millions of players faced a digital void after the game abruptly shut down without explanation. Widely referred to as the “Black Hole event”, it marked a complete suspension of gameplay during the transition between Fortnite chapters. What followed the blackout was not abandonment, but sustained attention, humour, speculation and community engagement across livestreaming platforms.

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**Funding:** This study was funded by Ministerio de Ciencia, Innovación y Universidades, Spain, Grant PID2020-115743GB-I00 funded by MICIU/AEI/ 10.13039/501100011033.

Received 2 June 2025  
Revised 30 August 2025  
28 October 2025  
Accepted 2 December 2025

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The current issue and full text archive of this journal is available on Emerald Insight at: <https://www.emerald.com/insight/0887-6045.htm>



Journal of Services Marketing  
40/10 (2026) 55–70  
Emerald Publishing Limited [ISSN 0887-6045]  
[DOI 10.1108/JSM-06-2025-0367]

At first sight, this episode could be mistaken for a service failure (Buttle and Burton, 2002; Colgate and Norris, 2001; Mccollough *et al.*, 2000): millions of players abruptly lost access to the game without warning. In contemporary service research, “service failure” is defined more broadly as a detraction in a stakeholder’s experience with a brand or provider’s service offering that can occur at *any touchpoint* and involve *any stakeholder*, not only during delivery nor only for the focal customer (Grégoire *et al.*, 2025). Against this backdrop, the Fortnite case differed in substance. Media coverage consistently framed it as a carefully orchestrated promotional stunt rather than an accidental outage (Crook, 2019; Gault, 2019; Webster, 2019). Although resembling failure in form, it was promotional in substance, engineered to produce suspense and collective engagement.

Based on this event, this study asks: How do emotional and communal dynamics unfold during a prolonged, online, collective waiting event and to what extent do they align with, or diverge from, the dominant model of waiting as linear dissatisfaction over time? We conceptualise this phenomenon as *digital co-waiting*: a form of synchronous, involuntary, digitally mediated waiting in which consumers collectively inhabit uncertain time through technology-mediated interactions. This framing emphasises the communal, affective and performative dimensions of waiting in digital contexts and foregrounds our main theoretical contribution. Methodologically, the paper combines grounded theory with computational sentiment analysis to examine real-time user interactions, offering an *in situ* view of emotional flux during prolonged online waiting. Our findings offer an empirical counterpoint to the dominant assumptions of waiting research and support a more nuanced understanding, in which humour, camaraderie and shared uncertainty play central roles.

## 2. Literature review

Waiting’s persistence as a research topic owes less to conceptual novelty than to its embeddedness in daily life. As a result, waiting research has become structured around a few dominant assumptions and repeated empirical forms. Firstly, most studies begin from the premise that waiting is a deviation from optimal service and therefore a source of dissatisfaction, frustration or abandonment (Antonides *et al.*, 2002; Lin and Chang, 2011). This negativity bias is reinforced by the logic of disconfirmation theory: when service delivery fails to meet temporal expectations, customer evaluations decline (Leclerc *et al.*, 1995). Perceived duration, cost of waiting and lack of information consistently emerge as negative moderators (Osuna, 1985; Ryan and Valverde, 2003; Wang *et al.*, 2018a). This paradigm is echoed across four decades of research. In nearly all cases, the goal of research is to minimise the impact of waiting, reduce its duration or mitigate its effects (Johnston, 1995; Wang *et al.*, 2018b).

Secondly, in services marketing, waiting has been overwhelmingly treated as an individual experience in the literature, despite ample evidence that social and environmental factors shape its perception. Exceptions to this remain outliers (Friman, 2010; Milgram *et al.*, 1986). This framing has been maintained even in contexts where the waiting environment is inherently social (Davis and Voilmann, 1990; Kosteci, 1996; Thompson *et al.*, 1996) such as hospitals and restaurants. Much of the literature flattens the experience

of waiting into measurable dissatisfaction, abstracted from the real-time intersubjective practices by which people endure, interpret or even perform the wait. However, outside of services marketing, queues are often interpreted as social systems regulated by norms, roles and expectations (Mann, 1970; Nie, 2000). Within such systems, fairness concerns and rule enforcement shape behaviour as much as time itself (Allon and Hanany, 2012; Fagundes, 2017). Queues operate through shared standards of “who goes when” (often, but not always, FIFO), with violations policed by bystanders and justified intrusions sometimes tolerated (Allon and Hanany, 2012; Mann, 1970). In “discretionary” contexts (e.g. museums, gyms, casual dining), people often speed up when others are visibly waiting, trading off some consumption utility for prosocial or fairness reasons (Ülkü *et al.*, 2022). Observational and interview studies show customers narrate, coordinate and aesthetically manage the queue environment (e.g. “making the line bearable”), with social regard acting as a bridge between waiting and downstream outcomes (Butcher and Heffernan, 2006; Pàmies *et al.*, 2016). This aligns with rhythm-analytical accounts: waiting unfolds as shared rhythms of attention and interruption, not merely elapsed minutes (Lefebvre, 2004). Nevertheless, few studies explore waiting in group settings, especially those facilitated by digital technologies. Recent exceptions include Wohn *et al.* (2018), who analyse emotional support and shared spectacle in livestream platforms. Such insights remain disconnected from the main arc of consumer waiting theory, which still privileges efficiency and control.

Thirdly, while a large literature exists on “acceptable wait times”, these studies rarely interrogate what makes a wait acceptable beyond its duration. For example, Antonides *et al.* (2002) demonstrate how disconfirmation between expected and actual wait time influences satisfaction, but their model still assumes that less is better. Even when affective or contextual factors are included, such as entertainment during the wait (Katz *et al.*, 1991) or post-wait service quality (Buell and Norton, 2011), the implication is that waiting must be compensated for, not valued on its own terms. The emotional architecture of the wait itself is underexamined. Work by Chebat *et al.* (1995) on emotional responses to line-waiting environments, and by Hui and Tse (1996) on music and mood regulation, hint at a more ambient and situational model of affect. Yet such perspectives remain marginal. Even studies that emphasise time distortion or mood congruency (Hornik and Zakay, 1996; Kellaris and Kent, 1992) tend to isolate psychological variables, rather than addressing the collective, improvisational nature of waiting as it unfolds in public or semi-public environments.

A small but growing body of research questions this foundational framing. Studies suggest that waiting can sometimes produce positive affect, enhanced value perceptions or a stronger sense of community (Giebelhausen *et al.*, 2011). Noone and Lin (2024) demonstrate that visible queues can function as signals of brand popularity, enhancing desirability. Kremer and Debo (2016) find that consumers sometimes choose longer waits to savour future consumption. These findings echo earlier conceptual arguments that perceived scarcity or delay can enhance object value (Brock, 1968), that people often infer quality from congestion (Veeraraghavan and Debo, 2009), and that waiting together, rather than alone, may confer social meaning.

In parallel, a more critical literature has emerged that frames waiting not only as tolerable, but as potentially expressive. Fishzon (2017) reframes queuing as a site of queer temporality, misaligned with capitalist rhythms, but filled with embodied potential. Zambetta *et al.* (2020) treat the wait as dramaturgical space, while Wang *et al.* (2023) demonstrate that curiosity, rather than irritation, can drive engagement in high-delay settings. This reframing echoes Carmon *et al.* (1995), who showed that delay can sometimes increase post-consumption enjoyment, and by Ryan *et al.* (2018), who propose a “positive waiting” framework to capture these ambivalences.

In sum, the literature on waiting evolved less by extending theory than by refining measures of duration, cost and tolerance. Its key constructs, perceived wait time, acceptable duration and service evaluation, remain tied to a loss-aversion logic. What is missing is a deeper empirical and theoretical understanding of waiting as a dynamic, collective and affective process, one that unfolds over time, interacts with social context and may not always be negative.

### 3. The evolving context of consumer waiting

Waiting for service is no longer what it used to be. Recent shifts in technology, media and global service infrastructures have reorganised the experience of waiting in ways that are not marginal, but foundational. The past five years, in particular, have seen a critical reconfiguration in how, where and with whom we wait. These changes have not yet been adequately reflected in the literature. The COVID-19 pandemic served as both a disruption and an accelerant. Waiting was restructured across domains, no longer something endured in crowded spaces, but displaced to digital interfaces, remote check-ins and asynchronous notification systems (Haleem *et al.*, 2021; Pantano *et al.*, 2020). Queues were virtualised. Appointments replaced arrival. SMS alerts, live updates and automated apology scripts re-scripted the temporality of service interactions.

We continued to wait, but now from home, online and often alone. As Ayodeji *et al.* (2023) note in their study of airports, satisfaction with waiting time is increasingly bound up with technological mediation, not just duration. The pandemic accelerated long-standing trends towards the digitalisation and social mediation of consumer time. Waiting no longer occurs at the edge of the service encounter but is embedded within it. Livestreamed events, digital premieres and online gaming environments have made waiting into a shared event. What was once an operational defect has become, in many cases, a performative and affective space (Wohn *et al.*, 2018). Audiences increasingly gather, anticipate and react together, often for extended periods, sharing humour, frustration, speculation and camaraderie through chat-based co-presence (Diwanji *et al.*, 2020; Recktenwald, 2017). Waiting is no longer a void to be filled, but a medium for connection, performance and meaning-making. The logic of waiting has also shifted from delay to suspense. As Wang *et al.* (2023) show, curiosity and speculation can enhance purchase intentions during queued waiting. Similarly, Ülkü *et al.* (2020) find that queuing can increase product enjoyment and post-consumption satisfaction. These effects are not incidental: they point to a

structural inversion of the classic logic of waiting-as-deficit. In the digital economy, waiting can be instrumentalised to build desire, narrative tension and social value.

This reconfiguration has consequences for both theory and method. Traditional models rely heavily on retrospective self-reporting or simulation-based lab work. But in livestreamed environments, waiting unfolds in real time and is documented by users themselves. While in earlier internet-based research, emotional responses to online waiting were notoriously difficult to measure (Ryan and Valverde, 2006), nowadays, streams of user-generated content, chat logs, memes, reactions, offer direct access to how waiting is experienced, represented and collectively negotiated, presenting opportunities to observe online waiting not through recollection, but as it unfolds, materially, socially and affectively.

Recent studies underscore that user-generated content (UGC) in live, socially networked settings is a strategic lever for firms, not just background chatter. In livestream commerce, real-time viewer comments and streamer–audience dialogue dynamically move both sales and follower growth, with clear evidence that UGC can be managed for commercial impact (Lang *et al.*, 2025). UGC can positively moderate the path from engagement to purchase, tying chat dynamics to revenue (Zhang *et al.*, 2024). At a broader level, customer-engagement metrics drawn from UGC (views, comments, time spent) consistently predict purchase intention and customer acquisition (Zheng *et al.*, 2022). Meta-analytic evidence across 156 UGC studies further shows review valence is among the strongest predictors of purchase intention, reinforcing UGC’s economic salience across contexts (Qiu and Zhang, 2024). These findings justify our focus on real-time chat as consequential market data and motivate our analysis of emotional dynamics during prolonged livestreamed digital co-waiting.

In sum, the consumer waiting experience has evolved across multiple dimensions: Spatially (from public queues to domestic screens); Temporally (from known durations to open-ended suspense); Socially (from isolated endurance to co-experienced interaction); Affectively (from assumed negativity to a more dynamic emotional texture); Methodologically (from recalled responses to real-time observability). This study contends that these shifts are not marginal, but structural. By grounding analysis in an extended, observable, digitally mediated wait, the following sections explore whether and how these transformations disrupt established assumptions about the nature and trajectory of consumer waiting.

To clarify how our study builds on existing research, we synthesized prior work on waiting into Table 1. The table contrasts offline socially mediated waiting with emerging work on digitally mediated waiting, and highlights the conceptual gaps that motivate our focus on digital co-waiting.

### 4. Method

This study adopts an exploratory, theory-building approach. Our methodology is grounded in constructivist principles and draws from grounded theory, adapted to suit the complexity and scale of digitally mediated consumer interactions. We follow a logic of conceptual emergence and iterative interpretation based on naturally occurring data (Corbin and Strauss, 2012;

Table 1 Offline vs digital waiting and the gap for digital co-waiting

Theme	Offline socially mediated waiting (queues, services)	Digitally mediated waiting (streams, platforms)	Gap / implication for <i>digital Co-Waiting</i>
Time and duration	Duration as central predictor of satisfaction; perceived vs. actual time often diverge (Hornik, 1984; Maister, 1985; Taylor, 1995)	Online waits rarely theorised; delays framed as downtime. Some evidence waits can enhance value (Buell and Norton, 2011; Noone and Lin, 2024)	Need to theorise time as more than duration: in digital contexts, waiting is affectively stretched and collectively modulated
Social atmospheres	Presence of others shapes mood, fairness, and service image (Tombs and McColl-Kennedy, 2003; Ülkü et al., 2022)	Co-presence enacted via chat, emotes, rituals; livestream mood regulation (Recktenwald, 2017; Diwanji et al., 2020)	Atmosphere in digital co-waiting emerges from platform affordances and collective participation, not just physical proximity
Affect and mood	Entertainment buffers negative affect; atmosphere matters more than duration (Katz, Larson and Larson, 1991; Friman, 2010)	Mood circulates through memes, speculation, humour in digital settings (Wohn et al., 2018; Ayodeji et al., 2023)	Digital co-waiting highlights affect as the <i>material</i> of waiting, not just a moderating factor
Fairness and justice	Queue discipline and perceived justice strongly affect satisfaction (Schmitt et al., 1992; Zhou and Soman, 2008)	Limited work on fairness in digital delays; norms are emergent and platform-specific	Research should examine how fairness/justice are enacted or redefined in networked waits
Signals and value	Longer waits may signal quality or popularity (Kremer and Debo, 2016; Ülkü et al., 2020)	Viewer counts, chat velocity, or engineered delays can signal hype (Noone and Lin, 2024)	Digital waits act as marketing signals, yet mechanisms remain underexplored
Participation and performance	Waiting often treated as passive, though studies note occasional communal meaning (Giebelhausen et al., 2011; De Vries et al., 2018)	Chat rituals, memes, speculation turn delay into performance (Recktenwald, 2017; Wexler, 2015)	Digital co-waiting foregrounds waiting as <i>active practice</i> and a site of co-production
Uncertainty and information	Providing updates reduces anxiety and dissatisfaction (Hui and Tse, 1996; Osuna, 1985)	Engineered ambiguity can sustain interest (Fortnite case; Buell and Norton, 2011)	Need to theorise uncertainty as potentially generative, not just problematic
Managerial strategies	Reduce waits, manage perceptions, fill time with distraction (Maister, 1985; Katz et al., 1991)	Digital strategies include filler interfaces, transparency cues, gamification (Lee et al., 2012)	Beyond efficiency: platforms can design <i>waiting as experience</i> rather than as loss

Glaser and Strauss, 2017). Grounded theory was selected for its value in enabling the inductive development of concepts from data. Our approach reflects recent methodological adaptations in consumer and media research that use grounded theory to study digitally archived, multi-participant data environments. Consistent with work on livestream pragmatics and data capture, we treat chat as a high-volume, many-to-one discourse stream where brevity, timing offsets and emotes/emoji are analytically meaningful features of participation (Harpstead et al., 2019; Recktenwald, 2017).

For this study, we focused specifically on YouTube streams, as they provided replayable chat logs that could be systematically exported and analysed. These livestreams became collective viewing and discussion spaces, where users typed their reactions in real time, speculating, joking, expressing frustration or building camaraderie. We treat this setting as a naturalistic laboratory for observing digitally mediated waiting at scale. This data set captures reactions as they occurred, unfiltered and unprompted. The full data set comprised approximately 28,000 chat messages over the 37 h blackout. For the qualitative GT coding, we employed two focused 4 h capture windows (approximately 5,700 messages in total), allowing for in-depth comparative analysis across the 2 days. In Section 5 we also visualise a shorter 2 h 20 min segment as an illustrative example of the affective dynamics

over time. While the volume and anonymity of data diverge from traditional qualitative sampling practices, similar approaches have been validated in studies of Twitch, YouTube (Harpstead et al., 2019; Recktenwald, 2017). For our purposes, we treat the Black Hole as a planned, eventised suspension of normal gameplay that staged a shared waiting experience rather than a stakeholder *detraction* in the sense of a service failure for most participants (Grégoire et al., 2025). We note that some individuals may still have experienced the event as a *detraction*; our focus is the collective co-waiting dynamics.

Data analysis followed the logic of grounded theory coding. Two researchers independently performed open coding on multiple segments of chat data to identify emergent emotional and behavioural categories. These included expressions of impatience, speculation, humour, frustration, anticipation and group bonding. Axial coding was used to link categories and develop an understanding of how emotional responses shifted over time and in response to key moments. Selective coding allowed for the identification of a core category, and the development of a conceptual model capturing the emotional dynamics of prolonged online waiting. Throughout the process, we prioritised language used by participants and maintained a constant comparison between incidents and categories (Corbin and Strauss, 2012). To enhance transparency, we provide in Appendix 1 a coding table linking

first-order codes to our six categories and higher-order concepts, and we report inter-coder agreement prior to reconciliation.

#### 4.1 Category distinctiveness and boundary rules

To avoid overlap across categories, we operationalised mutually exclusive boundaries and decision rules. “Impatience” captures forward-pushing time demands (e.g. when does it change?) even if negatively valenced; it is not coded as “negative reaction” unless the post evaluates the brand/event (e.g. this is trash). “Humour and shared language” includes irony/memes/ritual phrases (e.g. WE LOVE FORTNITE, xD), regardless of positive or negative stance; evaluative humour (e.g. this game is dead lol) is double-checked, and if the evaluative content dominates it is assigned to the appropriate positive/negative category. “Confusion and information seeking” covers questions, rumours, numerology (e.g. you can see the number 15 [...] tomorrow is the update!) and link-sharing intended to resolve uncertainty; it is not used for venting. “Entertainment and distraction” marks self-distraction and diversion suggestions (e.g. I’m just watching anime [...]), let’s play Minecraft), not jokes *per se*.

#### 4.2 Coding architecture and decision hierarchy

We distinguish evaluative-stance categories (*positive reactions*; *negative reactions*) from process/practice categories (*impatience*; *entertainment and distraction*; *confusion and information seeking*; *humour and shared language*). Coding followed a single-label decision hierarchy: (1) if a message contains an explicit evaluation of the event/brand, it is coded as *positive* or *negative*; (2) otherwise, it is coded by the dominant practice the message performs (temporal pressure; diversionary self-occupation; uncertainty-resolution; playful bonding). In borderline cases (e.g. humorous posts with mild evaluation), we apply a dominance rule: explicit evaluation → *positive/negative*; otherwise → the relevant practice category.

#### 4.3 Sampling design and data sources

We employed a purposeful, event-based sampling strategy focused on two non-overlapping 4-hour capture windows (one from Day 1 and one from Day 2), capturing the full visible chat for each selected window. The first window was chosen from Day 1, which was marked by initial curiosity and anticipation. The second window was selected from Day 2, which featured heightened frustration and fatigue as the wait continued. These windows were intended to provide a comprehensive representation of the emotional evolution across the 37-hour period. Inclusion criteria were: (1) a livestream explicitly covering the Black Hole; (2) an active, public chat with replay access; and (3) sustained concurrent audience presence. We captured the entire visible chat stream for each broadcast window of 4 h for each day to preserve the ecology of co-waiting interaction (rather than extracting short clips). The unit of analysis is the individual chat message. In these two windows 97% of messages are English (heuristic estimate); we therefore restrict automated sentiment to English (for computational efficiency) while including English, Spanish, French and Arabic posts in qualitative coding (translating quotes where needed).

#### 4.4 Data capture and reproducibility

We exported chat replays to structured, UTF-8 text with timestamps, anonymised user handles and message strings. All transformation steps were scripted and are re-runnable (capture → normalise → language flagging → automated sentiment for eligible messages → qualitative coding). This “show your work” approach follows livestream research guidance to document access points, logging choices and transformations for replicability (Harpstead *et al.*, 2019). We exported the complete Live Chat replay from YouTube. Posts removed by platform moderation or deleted by users are not retrievable in these replays and are therefore absent from our data set.

#### 4.5 Preprocessing and language handling

Messages were lower-cased (preserving proper nouns where needed), URLs and platform notices removed, and whitespace normalised. Emoji and emotes were mapped to textual tokens (e.g.: joy:) to retain affective signals typical of live-chat (Recktenwald, 2017). We applied message-level language identification to flag non-English posts. Automated sentiment scoring (below) was restricted to the English subset; multilingual messages remained eligible for qualitative coding when interpretable by the coders. To mitigate the challenges posed by sarcasm, irony and informal language commonly found in live chat, we employed a dual validation strategy. Firstly, we mapped common emojis and slang to standardised tokens, such as converting “lol”, “xd” and “lmao” to “:joy:” to preserve affective signals. Secondly, we cross-validated sentiment results through human coding, where coders assessed the sentiment of ambiguous messages to ensure consistency with the overall tone of the conversation. These steps helped reduce the risk of misinterpretation due to the informal and dynamic nature of live-chat communication. We did not infer geography or nationality from usernames or orthography. Eligibility required at least one alphanumeric or mapped-emoji token after normalisation. To test robustness, we conducted sensitivity checks by excluding slang-heavy segments and by varying the sentiment smoothing window. In both cases, the overall affective trajectory remained substantively stable, supporting the reliability of the automated sentiment analysis. We also flagged and removed obvious bot-generated strings and collapsed repetitive copy-paste bursts. Re-running sentiment analysis and coding with and without these filters yielded substantively identical results.

In parallel with qualitative coding, we applied complementary analytical techniques to deepen our understanding of the emotional arc. Sentiment analysis was conducted using a lexicon-based natural language processing (NLP) approach tailored for short-form, informal text, such as social media and live chat. The analysis assessed the polarity (positive, negative, neutral) and intensity of user comments across distinct temporal segments. By aggregating sentiment trends over time, we were able to track fluctuations in affective tone and relate them to contextual shifts in the event. Using natural language processing tools, each comment was automatically scored for polarity (from −1.0–1.0, indicating negative to positive sentiment). These scores were aggregated and visualised as a rolling average over time, revealing temporal shifts in collective emotion across the duration of the event.

The approach builds on established practices in analysing large-scale digital discourse, and was cross-validated through multiple coding passes to ensure interpretive coherence with the qualitative findings. This dual approach, grounded theory coding and computational sentiment tracking, enabled us to access both the granular specificity of chat interaction and the broad emotional arc of the waiting experience. Together, they provide a composite picture of how online co-waiting is experienced, sustained and eventually transformed by users navigating uncertainty, speculation and digital companionship. Technically, we implemented sentiment with a lexicon suitable for short, informal texts (e.g. VADER-style polarity), computed in Python using standard libraries (pandas, scikit-learn); qualitative coding was conducted in NVivo. For transparency, [Appendix 2](#) details the sentiment pipeline and provides examples of slang/emoji mappings. We observed substantial agreement for automated polarity against human labels ( $\kappa \approx 0.72$ ,  $n = 500$ ). Separately, inter-coder reliability on a stratified 10% sample for first-order codes was substantial ( $\kappa \approx 0.76$ ) prior to reconciliation.

#### 4.6 Integration of qualitative and quantitative strands

We aligned the rolling sentiment series with the chat timeline and triangulated peaks/troughs with co-occurring codes and exemplar excerpts. This integration allowed us to interpret inflection points (e.g. rumoured fix times) and to relate humour/rituals to temporary positivity spikes and later fatigue.

To preserve analytic rigour, an audit trail was maintained, coding disagreements were reconciled collaboratively, and coding schemes were revised iteratively. While we acknowledge that not all participants are equally represented in the data set, and that some contributed prolifically while others posted only once, this variability is treated as part of the natural ecology of online interaction, not a limitation. In line with the logic of constructivist research, our goal is not statistical representation, but conceptual understanding of an emergent consumer phenomenon. All data analysed in this study were drawn from publicly accessible, searchable and platform-archived YouTube chats. No personally identifying information was retained. Posts were anonymised at the point of capture, and all excerpts are reported in aggregate to minimise the possibility of identification. Following established netnography ethics guidelines (Kozinets, 2002; Kozinets and Gretzel, 2024) and recommendations on internet research ethics (Markham and Buchanan, 2012), we treated these chats as public discourse while exercising caution in representation. We report the software stack in [Appendix 3](#) and provide pseudo-code for the preprocessing pipeline to facilitate replication.

While our study shares affinities with netnography, in that it analyses naturally occurring online discourse, attends to community dynamics and employs qualitative coding practices (Kozinets, 2002; Kozinets and Gretzel, 2024), we do not classify it as a netnography. Netnographic research typically entails prolonged immersion, interaction and iterative engagement with an online community across its evolving contexts (Kozinets *et al.*, 2018). By contrast, our focus was on a time-delimited, event-based data set of livestream chat interactions, rather than sustained ethnographic immersion in a stable digital community. Our approach is *netnographic in spirit*,

but more precisely a grounded theory study of digital trace data within a bounded cultural moment.

## 5. Results

### 5.1 Open coding

From the initial analysis, we identified multiple codes, which we grouped into six major categories, each of which contained numerous unique codes: Frustration and Impatience, Entertainment and Distraction, Confusion and Information Seeking, Humour and Shared Language, Positive Reactions and Negative Reactions. These categories each integrate related subcodes that co-occurred in the data: for example, *entertainment and distraction* both describe diversionary practices during suspended time; *confusion and information seeking* capture complementary expressions of uncertainty and search for clarity; and *humour and shared language* reflect collective bonding through playful repetition and memes. For clarity, two categories capture evaluative stance (*positive; negative*), whereas the other four capture distinct practices of co-waiting (*impatience; entertainment and distraction; confusion and information seeking; humour and shared language*); when explicit evaluation is present it takes precedence, otherwise we assign the single dominant practice.

Using real-time data from livestream chat entries, we were able to observe the unfolding emotional atmosphere with high temporal granularity. For example, early comments such as “Raise your hand if you’re here for the comments” and repeated phrases like “ORA ORA ORA” illustrate the collective ritualisation and humour that dominated the early stages of the wait. These expressions suggest a performative orientation to the livestream chat itself, in which participants created entertainment and camaraderie from the very act of waiting.

### 5.2 Axial coding

In the axial coding stage, we linked the categories and subcategories identified during open coding. This process involved reassembling the data by identifying causal conditions, contextual factors, intervening conditions, strategies and consequences. The central phenomenon identified in this study is the emotional response of players during a prolonged waiting event. The causal conditions leading to these emotional responses included the lack of information and the extended duration of the wait. The context included the online live streaming environment and the shared nature of the experience. Intervening conditions such as community dynamics and individual coping mechanisms shaped users’ behaviours and reactions. Players expressed frustration and confusion, often stating, “We need some info, Epic!” or “Is this a glitch or part of the game?”, while also turning to speculative or humorous coping strategies, such as, “New trailer leak for chapter 2 gentleman” or “I’m just watching anime with the hole on my TV [...]” Actions and interactions included expressing emotions, seeking information and engaging in distractions or jokes. The consequences of these actions were emotionally mixed: they led to both emotional shifts and community bonding, but also to eventual fatigue and disappointment. Notably, users began to show signs of resignation as the wait dragged on. One user remarked: “Still here [...] what are they

thinking?”), while another offered a more sombre comment: “We lost the will to meme”.

Through axial coding, we grouped open codes into categories that captured patterns across the data. For example, expressions of boredom, anger and playfulness were consolidated into the broader category of emotional responses, while comments involving speculation, rumours or predictions were gathered into the category of cognitive responses. Similarly, behaviours such as staying, leaving, distracting oneself or actively filling the wait were grouped into behavioural responses. These categories were then related to one another by considering their orientation (positive, neutral, negative or ambivalent) and by identifying how they were directed towards the event itself, the broadcasting agent or the game object. Through selective coding, these interrelated categories were abstracted into the core phenomenon of “reactions to the wait”. This abstraction emphasises how emotions, cognitions and behaviours were not isolated but dynamically linked, often mediated through practice modes such as humour, confusion and information-seeking, impatience and distraction.

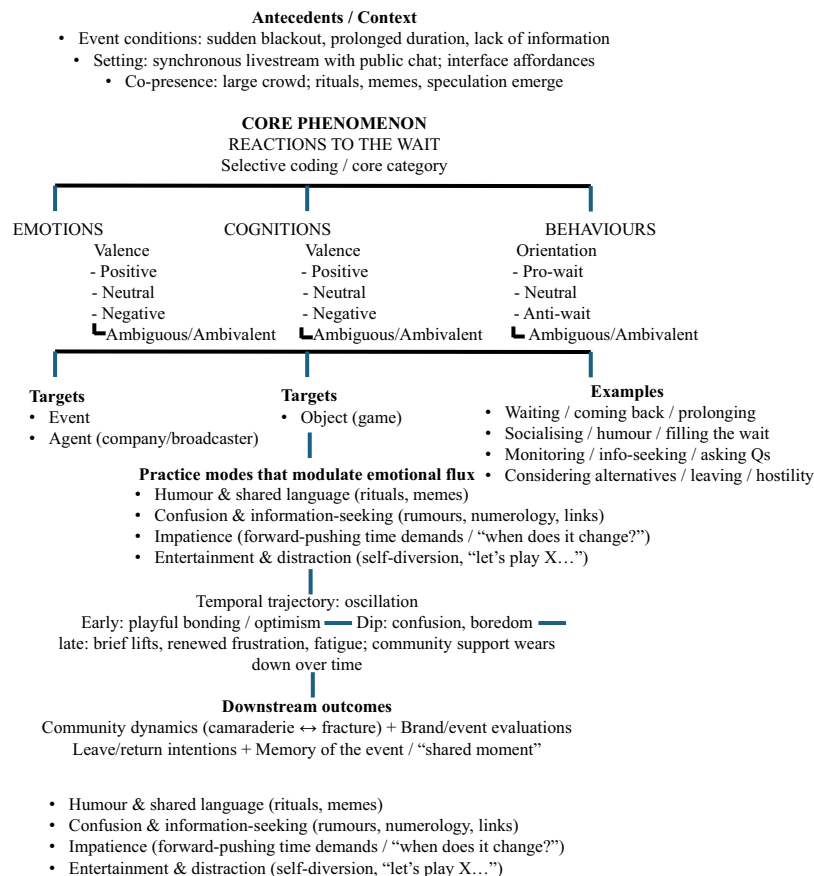
5.3 Selective coding

The core category that emerged from this analysis is “Emotional Responses and Community Dynamics during Prolonged Online Waiting Events”. Rather than a simple accumulation of dissatisfaction over time, the data revealed that waiting was experienced cyclically, with emotions rising and

falling in waves. These emotional dynamics were shaped by the interplay of community engagement, shared meaning-making and shifting expectations. Positive emotions such as excitement and anticipation were often triggered by speculation or collective humour (“This is better than actual Fortnite”), but proved difficult to sustain. Negative emotions grew more pronounced over time, especially as the lack of updates undermined group morale (“Epic better have something amazing after this”; “Fortnite is dead”). Crucially, humour and camaraderie acted as buffers, softening frustration and maintaining cohesion even as fatigue set in. Jokes, memes and playful exchanges functioned as affective scaffolds, allowing participants to manage disappointment without entirely dissolving the collective. Mapping these emotional waves across time shows how digital waiting is not a single state but a shifting ecology of mood, interaction and adaptation. These interrelations abstract to the core phenomenon of reactions to the wait, synthesised in Figure 1.

Figure 1 illustrates how the core phenomenon, reactions to the wait, was shaped by antecedent event conditions and the setting of the livestream. These reactions manifested across three interrelated domains: emotions, cognitions and behaviours, each varying in valence and orientation. The model highlights how practice modes such as humour, confusion and information-seeking, impatience and distraction modulated these reactions, producing oscillations in collective sentiment over time. Finally, the framework points to downstream

Figure 1 Process model of reactions during the Fortnite Black Hole event



outcomes, including shifts in community dynamics, evaluations of the brand, intentions to leave or return and the shared memory of the event. This framework offers a synthesised view of digital co-waiting and provides the basis for the discussion of its theoretical implications in the next section.

#### 5.4 Sentiment trajectory analysis

We conducted a computational sentiment analysis of the English-language subset of the chat corpus (see [Appendix 2](#)). Each message was scored for sentiment polarity (positive to negative), and a rolling average was plotted across the duration of the livestream. This allowed us to track emotional fluctuations over time and align them with key events, turning points and community dynamics observed in the chat. The result is presented in [Figure 2](#). It shows a fluctuating sentiment pattern, with an initial phase of relative positivity and collective engagement, a noticeable dip in the middle as frustration and boredom rise, and oscillating emotional tone towards the end, with short-lived spikes of excitement and deepening frustration.

[Figure 2](#) plots the rolling average sentiment polarity (positive–negative) of chatroom comments over time. The *x*-axis represents the sequence of comments from a 2 h 20 min segment of the 37 h livestream, combining an early-stage sample (Day 1:03:18–03:42 UTC - excerpt) with a late-stage sample (Day 2:01:16–03:12 UTC). The *y*-axis indicates the average sentiment polarity at each moment. Higher values suggest humour or optimism; lower values indicate frustration or boredom. A smoothing window of 50 comments was applied to visualise temporal trends. Because smoothing uses a fixed message window, intervals compress in high-volume periods and expand in low-volume periods; the figure should therefore be read as relative emotional fluctuation rather than a uniform time series.

The chart shows how players' emotional responses changed as the wait progressed. Each data point reflects the average emotional tone of a group of user comments at that moment, using a rolling window to smooth out short-term noise. The vertical axis shows whether users were feeling positive (above the line), negative (below the line) or neutral (around zero).

The horizontal axis moves forward in time across the two analysed segments of the 37 h event. In the early part of the wait, the line sits slightly above zero, reflecting general curiosity, humour and a playful atmosphere in the chat. Users were engaging socially, joking and speculating. As time went on, the curve starts to drop, showing rising frustration and boredom. Some small spikes upwards indicate short bursts of renewed hope, often linked to rumours, glitches or user speculation, but these are short-lived. This pattern suggests that the wait was not experienced in a straight line of growing negativity. Instead, emotions fluctuated, rising and falling in response to both social dynamics and the absence of information. The community supported each other for a while, but even that began to wear down. These emotional waves help explain why long digital waits can feel at once social and exhausting.

#### 5.5 Note on boundaries

[Table 2](#) includes brief boundary exemplars illustrating how we adjudicated common edge cases (e.g. impatience vs negative; humour vs positive; humour vs distraction; shared language vs positive) using the decision hierarchy described in Section 4.

To aid interpretation of the trajectory, [Table 2](#) aligns early/mid/late phases with nearby positive/negative sentiment spikes, the dominant code and an anonymised exemplar quote. Excerpts are anonymised and minimally edited for clarity; they are representative of clusters near the indicated peaks/troughs. See [Appendix 1](#) for code definitions. While [Figure 1](#) shows the rolling polarity over time, [Table 2](#) links local peaks and dips to representative chat narratives and dominant codes.

## 6. Discussion and conclusion

Our findings suggest that consumer co-waiting in digitally mediated, co-present contexts is non-linear, socially modulated and affectively rich, not simply endured, but actively shaped by communal dynamics and participatory meaning-making. These dynamics complicate the conventional understanding of waiting as an unproductive interval, instead framing it as an emotionally and socially generative temporal experience.

**Figure 2** Sentiment trajectory during a 2 h 20 min illustrative segment of the Fortnite Black Hole event (drawn from the full 8h10m corpus of ~28,000 messages)

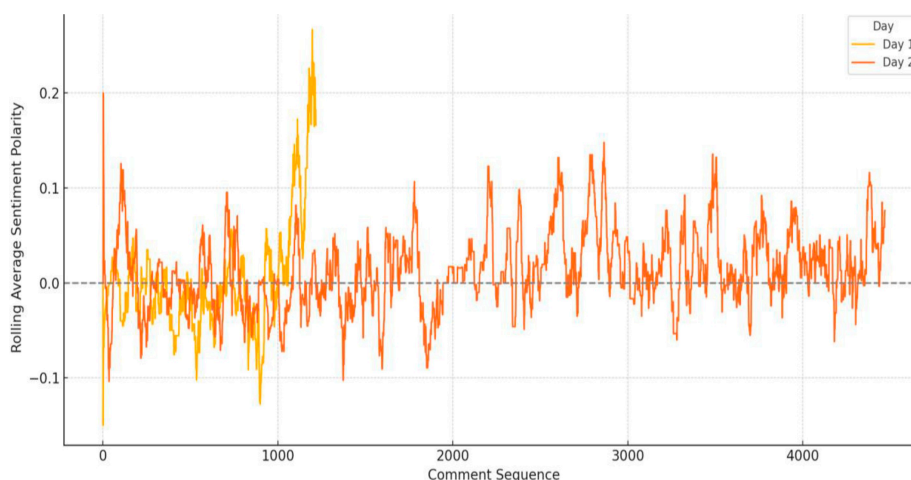


Table 2 Sentiment–narrative alignment across event phases

Phase (timeline)	Peak type	Exemplar quote (chat)	Dominant code/category	Interpretation
Early	Positive	“WE LOVE FORTNITE”	Meme/ritual phrase → humour and shared language	Communal humour/rituals produce early positivity bursts despite uncertainty
Early	Negative	“so when does it change?”	Asking for ETA → impatience	First impatience spikes appear as users probe for timing
Mid	Positive	“Goodbye guys, enjoy!” / “so HAPPY”	Positive bonding → positive reactions	Affiliation and optimism surface around rumoured updates
Mid	Negative	“Fortnite is dead. . . go play roblox”	“Game is dead” trope → negative reactions	Cynicism narratives coalesce, dipping sentiment mid-event
Late	Positive	“Fishing is great! . . . goodbye guys”	Self-distraction → entertainment and distraction	Diversion talk briefly lifts tone as users self-manage the wait
Late	Negative	“. . .trash rotting to death”	Hostility/insults → negative reactions	Fatigue culminates in hostile evaluations and a sustained low

Source(s): Authors’ own work

### 6.1 Theoretical implications

In what follows, we develop two interrelated theoretical contributions: firstly, by re-evaluating the dominant model of waiting, and secondly, by conceptualising waiting as a digitally mediated co-experience.

#### 6.1.1 Re-evaluating the dominant model of waiting

For decades, research has treated consumer waiting as a temporally bounded problem of duration management. Even in more affective approaches, such as Janakiraman *et al.* (2011), the assumption persists that emotional costs increase steadily with time. However, our analysis suggests a very different pattern. Emotional responses did not escalate linearly; instead, they oscillated across phases of humour, confusion, boredom, hope and frustration, a pattern closer to what Friman (2010) models as an affective circumplex, with activation and valence interacting dynamically, rather than declining unidirectionally over time. In short, time alone does not determine the quality of the wait. Structure, interaction and context do. This finding aligns with models of consumer emotion regulation (Bagozzi *et al.*, 1999; Westbrook and Oliver, 1991), where affective responses emerge from dynamic appraisals and social feedback rather than as passive by-products of delay. Moreover, our results support empirical critiques of the “time perception equals dissatisfaction” thesis, showing that anticipation, speculation and humour can serve as buffering or even enhancing mechanisms during prolonged waits.

It is also important to distinguish our case from the service-failure tradition (Buttle and Burton, 2002; Hess *et al.*, 2003; Mccollough *et al.*, 2000; Tax and Brown, 1998) and which under the updated view centres on stakeholder *detractions* that may arise at any touchpoint and involve observers as well as focal customers (Grégoire *et al.*, 2025). In the Black Hole event, no recovery was offered, nor was one expected: what looked like failure was in fact a designed spectacle. While some observers could plausibly construe the blackout as a *detraction*, our data show the dominant dynamic to be promotional co-waiting marked by humour, speculation and shared performance. Recognising this distinction ensures our contribution is not read as a study of failure and recovery, but as

an account of promotional co-waiting under engineered ambiguity.

#### 6.1.2 Waiting as digital co-experience

This study reveals waiting to be increasingly social and performative. In the livestreamed environment, participants were not waiting alone. They were digitally co-waiting, actively negotiating the meaning of the wait in real time. Through shared humour, speculation, ritual language and repeated interaction, consumers constructed an affective atmosphere around the event, by turns ironic, hopeful, bored and supportive. This is a significant departure from the individualised models of time valuation that have long dominated the field. In line with more recent work by Diwanji *et al.* (2020), we show that consumers in digital environments perform waiting as a social practice, modulating each other’s emotional states through co-presence and interaction.

We propose the term *digital co-waiting* to capture this shift: a mode of waiting in which the experience is collectively produced, temporally improvised and emotionally distributed across a networked crowd. What distinguishes digital co-waiting from prior accounts of socially mediated waiting in physical queues or hype events is threefold. Firstly, it is synchronous and involuntary: participants are bound together by a system-imposed delay rather than by voluntary gathering, as in queues for concerts or anticipation rituals for new product launches. Secondly, it is digitally mediated and textually enacted: the temporary community forms not through physical proximity but through ephemeral exchanges in a chatstream, where memes, chants and speculation cycle rapidly. Thirdly, it is collectively affective and temporally emergent: what comes into focus is not only anticipation of an external outcome but the modulation of shared mood as time itself is collectively inhabited.

Unlike earlier ideas of “positive waiting”, which emphasised anticipation and perceived value (Ryan *et al.*, 2018; Wang *et al.*, 2023), digital co-waiting foregrounds the emergent affective labour performed by consumers in real time, often in the absence of information, certainty or resolution. These findings connect to recent work on livestreaming platforms (Wohn *et al.*, 2018),

where spectatorship becomes a co-creative and emotionally charged practice. Waiting in such spaces is shaped not only by the outcome, anticipated but by the rhythm and texture of the social environment itself, the memes, jokes and emotional contagion circulating through the chat. It is not the duration alone, but the density of social meaning, that structures the lived experience of waiting.

Taken together, these analyses point to three shifts. Firstly, in long, ambiguous waits, *atmosphere* rather than elapsed minutes organises experience: mood, ritual and interface cues sustain engagement. Secondly, waiting is not passive but *performative*: participants co-create the delay through humour, repetition and coordination. Thirdly, *uncertainty* need not be purely negative; when scaffolded, it can sustain curiosity and collective attention. These shifts frame the implications that follow.

### 6.2 Methodological implications

Building on these shifts, we open up a new methodological space for waiting research. In contrast to prior studies relying entirely on retrospective reports, this study shows how live data from public digital environments enables researchers to track affective and behavioural patterns over time, not as static endpoints, but as emergent trajectories. This echoes [Carmon's \(1991\)](#) appeal to move beyond physical efficiency metrics and investigate how consumers live through time in commercial spaces. Our multimethod approach, combining grounded theory coding with computational sentiment analysis, demonstrates a viable template for capturing the temporal and emotional contours of waiting in digital contexts. Using real-time chat transcripts as data not only circumvents the distortions of post-hoc recall, but also grants access to intersubjective processes such as irony, mimicry and collective mood shifts. In this sense, our contribution is as much methodological as theoretical: it reorients the study of waiting towards its real-time, affective dynamics.

We recognise that combining qualitative coding with computational sentiment analysis is not in itself technically novel; such mixed-method approaches are increasingly common in digital consumer research, social media analytics and service experience studies ([Zhang et al., 2024](#); [Zheng et al., 2022](#)). Our contribution lies elsewhere. Firstly, rather than treating computational sentiment analysis as a stand-alone measure, we integrate it with grounded coding to reveal how collective affect evolves in real time. This alignment of micro-level interpretive categories with macro-level sentiment trajectories enables us to visualise emotional waves, fluctuations of humour, speculation, fatigue and frustration, that would remain invisible through either approach alone. Secondly, we apply these tools to an empirical domain rarely accessed by consumer researchers: naturally occurring, large-scale, collective waiting data. Whereas most waiting studies rely on retrospective recall or laboratory simulations ([Taylor, 1995](#); [De Vries et al., 2018](#)), our approach captures the lived dynamics of delay as they unfolded, unprompted, across thousands of participants. Finally, we are attentive to the methodological debates surrounding computational sentiment analysis, its difficulties with irony, multilinguality and sarcasm; its reliance on lexicons ill-suited to fast-moving chat streams; and its tendency to over-simplify affect ([Harpstead et al., 2019](#); [Li, 2023](#); [Recktenwald, 2017](#); [Sykora et al., 2020](#)). We

addressed these challenges through emoji/slang mapping, cross-validation with human coding, and by treating automated sentiment not as truth but as a complementary lens. In this sense, the methodological contribution is not a technical advance but an epistemological one: demonstrating how real-time, collective and affectively complex consumer phenomena can be studied through a carefully integrated multimethod design.

### 6.3 Managerial and practical implications

The findings of this study carry important implications for managers, service providers and platform designers. Firstly, waiting is not an empty interval but a socially charged period of consumer interaction. During the Fortnite Black Hole, participants collectively created humour, rituals and speculation that sustained engagement despite uncertainty. Managers can thus reframe waiting spaces as opportunities for co-experience rather than mere dissatisfaction points ([Buhalis and Sinarta, 2019](#); [Pralhad and Ramaswamy, 2004](#)).

Secondly, emotional dynamics in waiting are cyclical, not linear: oscillating between humour, speculation, frustration and solidarity. From a service experience perspective, these affective waves represent touchpoints in the customer journey. Rather than treating waiting as a single negative touchpoint, managers can map its phases and design interventions that support positive transitions, such as injecting light information when confusion peaks, or providing playful prompts when fatigue threatens to dominate ([Lemon and Verhoef, 2016](#); [Noone and Lin, 2024](#)).

Thirdly, informational silence can provoke speculation and collective negativity. Even minimal communication, such as updates, jokes or interactive features, can shift the waiting atmosphere towards solidarity instead of frustration ([Buell and Norton, 2011](#); [Tombs and McColl-Kennedy, 2003](#)).

Fourthly, digital co-waiting shows that interface affordances, chat reactions, prompts, moderation tools, actively shape how delays are experienced. Contemporary evidence confirms that waiting design matters: [Yu \(Yu, 2023\)](#) demonstrates that interactive waiting strategies (e.g. providing feedback, alleviating anxiety, compensating for excessive waits) improved user experience by 8.4% and increased usage by 14.7%. This empirical link between waiting design and engagement reinforces our findings: waiting can be transformed from downtime into a moment of value creation. For managers, this means treating waiting as a designable component of the service journey, not as a residual problem. This aligns with research on experience co-creation and UGC engagement, which shows that consumer participation generates value not only in usage but also in the shared moments leading up to it ([Wang et al., 2024](#); [Zheng et al., 2022](#)). Therefore, managers should see waiting not as wasted time but as a temporal resource in the service encounter. By recognising its affective and social texture, organisations can mitigate frustration, sustain engagement and even create memorable consumer experiences during periods once regarded as dead time.

### 6.4 Limitations

While this study advances understanding of digital co-waiting, several limitations must be acknowledged. Firstly, the empirical context is specific: the Fortnite Black Hole event was an

unusual, large-scale and highly publicised occurrence. Although it provides a rich case of collective online waiting, its exceptional nature may limit the generalisability of our findings to more routine or commercially managed waiting situations. Future research should examine whether similar dynamics emerge in contexts such as retail drops, online ticketing or customer support queues.

Secondly, the data is confined to public livestream chat transcripts. This medium captures spontaneous and large-scale interaction but excludes other modes of participation such as voice chat, private messages or off-platform discussions. As such, our analysis represents a partial view of the wider ecology of digital waiting practices. Further work could triangulate across multiple platforms or incorporate multimodal data to capture the full texture of consumer interaction.

Thirdly, our mixed-method design carries methodological constraints. Sentiment analysis of fast-moving chat streams is challenged by irony, slang and multilingual expression, even when complemented by human coding. Although we mitigated these issues through emoji/slang mapping and cross-validation, future studies might refine computational tools or integrate more advanced models of affective analysis to capture subtleties of collective mood.

Finally, while our analysis identifies broad phases of sentiment oscillation, it does not trace how individual consumers moved through these trajectories, nor how personal characteristics shaped their responses. Longitudinal or panel-based designs could add depth by examining how digital co-waiting is experienced across individuals and groups over time.

Taken together, these limitations do not undermine our findings but instead highlight opportunities for further research. They point towards the need to test and extend the framework of digital co-waiting across contexts, methods and populations, thereby refining its explanatory power.

### 6.5 Directions for future research

This paper marks an initial attempt to reframe waiting as an interactive and expressive consumer phenomenon rather than a deficit to be managed. Future studies might build on this by: Exploring co-waiting in different cultural or commercial contexts (e.g. live retail drops, ticketing platforms, online support environments); Investigating the role of humour, ritual language or speculation in sustaining engagement during uncertain waits; Using real-time or longitudinal methods to trace emotional dynamics across different forms of temporal disruption (planned vs unexpected, solitary vs collective, informational vs ambiguous); Developing typologies of digital waiting experiences, including differences in pacing, crowd behaviour and platform affordances.

In addition, further research could investigate the thresholds at which positive social interaction becomes overwhelmed by duration-based fatigue, in other words, when camaraderie gives way to cynicism. This inflection point is crucial for designing digital waiting environments that sustain engagement without incurring reputational risk. Future work might also explore the intersection between algorithmic pacing (e.g. countdown timers, push notifications) and perceived control in digital wait contexts.

In summary, this study challenges the default premise that waiting worsens linearly over time. It demonstrates instead that

digital waiting, when experienced collectively, is shaped by shared affect, speculative interaction and participatory sense-making. These findings call for a fundamental rethinking of waiting in consumer research: not as a duration to be minimised, but as a temporality to be understood.

### 6.6 Conclusion

This paper has introduced the concept of digital co-waiting to capture the collective, affective and participatory dimensions of waiting in digital environments. Through the case of the Fortnite Black Hole, we demonstrate how consumers not only endure but actively perform waiting, transforming indeterminate suspension into a shared experience of humour, speculation and ritual. In doing so, we extend waiting research beyond its traditional focus on duration, fairness and managerial mitigation, showing that uncertainty itself can be generative when scaffolded by digital affordances. These insights have implications for theory, methodology and practice. Theoretically, they reposition waiting as a site of atmosphere and co-production. Methodologically, they point to the value of event-based and affect-sensitive approaches for studying consumer temporality. Practically, they suggest that waiting can be designed as part of the experience journey, rather than eliminated as inefficiency. Future research could explore digital co-waiting across other platforms, service settings and cultural contexts, asking when and how consumers mobilise affect and participation to inhabit suspended time together. By foregrounding waiting not as emptiness but as a social medium, this study invites a broader re-thinking of how consumers dwell in time, revealing that even moments of enforced stillness can become stages for emotion, creativity and collective meaning.

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## Appendix 1

Table A1 Coding table

First-order code	Brief definition	Example (from day logs)	Category	Higher-order concept
Asking for ETA	Direct requests for timing/status	So when does it change?	Impatience	Regulating uncertainty
Release time query	Anticipated schedule	When is the new rumored release time?	Impatience	Regulating uncertainty
Urging action	Pressure / impatience intensifiers	When does it come out	Impatience	Regulating uncertainty
Rumour/leak sharing	Circulating alleged updates	New trailer leak for chapter 2 gentleman	Confusion and information seeking	Sensemaking under opacity
Linkless ‘leaks’	Referencing leaks without links	Leaks are saying this is going to last till Tuesday.	Confusion and information seeking	Sensemaking under opacity
Numerology/reading screen	Interpreting numbers/symbols	You can see the number 15... tomorrow is the update!	Confusion and information seeking	Sensemaking under opacity
Open ‘what if...’	Counterfactual speculation	What if... we’re all gonna die	Confusion and information seeking	Sensemaking under opacity
Absurdist humour	Playful exaggeration/irony	Lmao there is no world	Humour and shared language	Affective buffering
Meme/ritual phrase	Shared chant/slogan	WE LOVE FORTNITE	Humour and shared language	Affective buffering
Self-distraction	Announcing diversion	im just watching anime with the hole on my tv...	Entertainment and distraction	Attention management
Suggesting alternatives	Proposing other games/media	Now let’s play minecraft	Entertainment and distraction	Attention management
Positive bonding	Affiliation/encouragement	Goodbye guys, enjoy!	Positive reactions	Community cohesion
Brand defence	Countering negativity	Fortnite... made more money than everyone in this chat	Positive reactions	Community cohesion
“Game is dead” trope	Dismissive evaluation	Fortnite is dead... go play roblox	Negative reactions	Cynicism and fatigue
Hostility/insults	Adversarial jabs	...trash rotting to death	Negative reactions	Cynicism and fatigue

Boundary exemplars (*coding decision rules*). To illustrate how overlap cases were adjudicated, we provide anonymised examples:

- “Fortnite is dead lol” → *Negative reaction* (evaluation dominates; humour secondary).
- “WE LOVE FORTNITE” (repeated ironically) → *Humour and shared language* (bonding dominates; no explicit evaluation).
- “when is this over??” → *Impatience* (temporal pressure only; no evaluation).
- “brb, watching anime until this ends” → *Entertainment and distraction* (self-diversion, not humour).

### Appendix 2. Sentiment pipeline and emoji/slang mapping

*B.1 pipeline (English subset used for sentiment; non-English retained for qualitative coding):*

- Load chat replays → normalise (lowercase; strip URLs/platform notices; collapse whitespace).
- Map emoji/emotes/slang to preserve affect (illustrative): xD/XD/lol/lmao/rofl →: joy;; gg →: acknowledge;; rip/F →: respect:.
- Message-level language flagging; only English-flagged messages are scored for sentiment; all languages remain eligible for qualitative coding when interpretable.
- Sentiment: lexicon suitable for short informal text (VADER-style) → polarity in [−1, + 1].

- Aggregate with a rolling average (*50-message window*) tuned to smooth fast chat while keeping spikes.
- Triangulate peaks/troughs with co-occurring qualitative codes and exemplar quotes.

### *B.2 Validation:*

- Human labels on n=500 English messages; model vs human agreement  $\kappa \approx 0.72$  (substantial).
- Known issues (sarcasm/irony) mitigated via (i) emoji/slang mapping, (ii) code-aligned interpretation, (iii) avoiding strong claims on small fluctuations.

### *B.3 Language handling (audit):*

Non-English posts are present but a small minority in these two windows; restricting sentiment to English minimally impacts the trajectory. Multilingual content is retained for qualitative analysis where interpretable.

### Appendix 3. Software and reproducibility

- Qualitative coding: NVivo 12 Pro (open → axial → selective).
- Scripting/data handling: Python 3.x (pandas, regex).
- Sentiment: lexicon-based (VADER-style), with custom emoji/slang mapping.
- Reliability: Cohen’s  $\kappa$  via scikit-learn.
- Artifacts: deterministic scripts for preprocessing; parameters documented in comments.

- Data availability: raw live-chat replays are public; derived datasets include anonymised message IDs, timestamps, text, language flag, sentiment score.
- Sample size note (for the two uploaded windows): Day 1 approximately 1.2k messages; Day 2 approximately 4.5k

messages; combined approximately 5.7k messages (the full study uses a larger corpus).

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