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DEVCOMS: A STUDY OF INDIE VIDEO GAME DEVELOPERS' COMMUNITY-BUILDING RHETORICS LEADING TO LAUNCH

Research Paper

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Abstract

Competition in the gaming market is fierce. Yet, Independent (“Indie”) Game Developers (IGDs) with limited resources managed to carve out an existence. In the IGD scene, the social media platform Twitter is considered ideal for intra-industry marketing and community building. In this study, 31 indie games and 17,599 tweets from official IGD accounts were coded and analysed according to their targeted audience (Broad vs. Narrow), message (Inclusionary vs. Exclusionary), and timing. Our findings indicate that commercially successful games converge on a pattern of rhetoric we dubbed ‘The SHuFL Model’, consisting of four phases: 1) a phase of ‘Seeding’ tweets to raise discoverability; 2) a ‘Feeding’ phase of active community engagement; 3) a ‘Leveraging’ phase where network effects are leveraged for a successful launch; 4) an optional ‘Hunting’ round of proactive solicitation during the ‘Seeding’ phase. ‘The SHuFL Model’ can be utilized by “grassroots” marketers to overcome platform gatekeeping.

Keywords: Brand Communities, Community Building, SHuFL, Game Development, Indie Developer, Social Media Marketing, Qualitative, Rhetoric Analysis, Thematic Analysis.

1 Introduction

For Indie Game Developers (IGDs) to have successful launches of their games, they may need to pay attention to what they say to their potential community, how to say it, and when. This is especially pertinent given the videogame industry’s sustained growth patterns. The industry has been growing at an average annual rate of 11% over the last 5 years, and 22% over the pandemic period (Statista, 2021). To put in perspective the dramatic growth of the industry in recent years, 4,009 PC games were released on Steam, a digital platform, in its first decade (2004-2014). While 2020 alone saw 10,263 releases (Clement, 2021b; SteamSpy, 2021).

Traditionally, IGDs paired up with third parties (e.g., video game publishers such as Square Enix and Paradox Interactive) to market and distribute their games in developer-publisher arrangements. However, platforms such as iOS’s AppStore, Android’s Google Play and PC’s Steam as well as crowdfunding and early access programs (Hill-Whittall, 2015), have given IGDs – even self-employed individuals – access to digital distribution channels that previously were locked away by publisher gatekeeping. Platform disruption has enabled IGDs to establish varying degrees of independence from publishers (Styhre, 2020). On one hand, platforms allow inexperienced developers to develop and release their games without substantial investment or publisher backing. On the other, the vast number of competitors flooding platforms has made it more difficult for small developers to stand out, especially

when they do not have an existing fanbase or brand. This predicament is known in the industry as “the discovery dilemma” (zukalous, 2021c). The dilemma is enforced by platforms’ use of algorithms to promote favoured complementors (Styhre, 2020). In a sense, the role of gatekeeper has been shifted from publishers in traditional distribution to platforms in digital distribution.

Literature on IGDs echoes that reality, stressing the need for a critical “mass of clicks” at launch (Styhre, 2020; zukalous, 2021c). Without it, a platform’s algorithm will assume that the game will generate little income going forward and let the game sink to the bottom of the proverbial pile. Hence, the majority of indie games released will not achieve sustainable commercial success (VG Insights, 2021). Styhre (2020) concluded that the best way to get this “mass of clicks” is through building a community pre-release. Therefore, the skill to leverage their community against platform algorithms is vital for IGDs. Still, the questions of “what”, “how” and “when” remains, necessitating the formulation of our research question as:

‘How do Indie Game Developers build brand communities before launching their first game?’

In the IGD community, Twitter is considered especially important for community building, thanks to its inexpensiveness and reach. Not only is Twitter a platform for engaging consumers directly, but it also connects IGDs with other IGDs, opinion leaders, and aggregators who then disseminate the brand information onto their respective communities (Golding, 2022; zukalous, 2021b, 2021a).

In this study, we investigated IGDs’ community-building efforts by devising research around DevCom (Developer Communication) rhetoric on Twitter using a sample of 31 games and 17,599 tweets (Section 3.2). This paper is primarily intended to inform new IGDs on how to approach community building, given its importance for their success and survival. Moreover, our goal was to generate practical implications generalizable to parties interested in building leverageable brand communities “from the ground up” (i.e., without pre-existing brand awareness and on limited budgets). Concurrently, our research adds to the body of literature on social media marketing and the initial formation of communities with the introduction of ‘The SHuFL model’, our answer to the “what”, “how” and “when” of community-building.

The remainder of the paper is structured as follows: Section 2 presents the dilemma that IGDs face, summarized from existing literature (growing size of community vs. maintaining distinct identity). Section 3 explains our method of analysing how IGDs, successfully or unsuccessfully, tackle said dilemma (using a deductive coding scheme). Section 4 details our findings – summarised in a DevCom pattern dubbed ‘The SHuFL model’ (‘Seeding’, ‘Hunting’, ‘Feeding’, and ‘Leveraging’), which commercially successful IGDs in our sample converged on. And Section 5 provides theoretical implications, practical implications for managerial action and suggestion(s) for future studies.

1.1 Background Information

The 175 billion USD (Clement, 2021a) video game industry is separated into two ends, the large-scale mainstream videogame productions on one – a.k.a. the “AAA” segment, and the more artistically-varied, niche-focused, smaller-scale, and commercially independent “indie” segment on the other (Styhre, 2020). An example of a AAA videogame is *The Witcher 3: the Wild Hunt*, which took a team of 250 to develop, retailed at 80 USD, and sold 30 mil copies to date (Connor, 2019; Reeves, 2021). While an example of an indie game is *Undertale*, developed by just one IGD, retailed at 10 USD and sold 3+ million copies to date (Fang, 2020). Whilst the AAA segment typically is associated with multi-million-dollar marketing budgets, the indie segment often has little budgets set aside for marketing campaigns – if any at all (Vu & Bezemer, 2021). A AAA game typically requires 400-600 developers over a 5+ year development cycle (Wallis, 2013). As a result, a AAA studio would consider a title a failure for selling 7.3 million copies within the first 12 months (Sterling, 2019). In contrast, we estimate that 255,000 (see calculation in Section 3.1) copies would be enough to sustain a small development team of 4 for the development of two games, recovering the outlay for developing the first game and funding the second (Hill-Whittall, 2015; Styhre, 2020).

2 Literature Review and Conceptual Framework

This section describes how the concepts of identity, community, and gatekeeping can be operationalized in the context of social media marketing. Styhre (2020) defined indie gaming in terms of 1) identity, 2) industry structure, 3) labour market position, and 4) creative output. Of the four definitions, identity arguably informs the other three. Styhre (2020) opined that it was the “commitment to childhood games” that primarily drove industry professionals to become IGDs. Indeed, traditionally, gamers had been stereotyped as introverted, tech-savvy young men. This marginal identity places IGDs outside the evolving AAA market that had become too “mainstream” for stereotypical gamers (Styhre & Remneland-Wikhamn, 2020). This then influences how IGDs should approach the greater gaming community and establish their brand communities, which build brand-self relationships with their potential customers in a way that resonates with that individual’s identity (Panigyrakis et al., 2020).

Anderson (1983) defined identity as “an individual’s perception of who they are (or are not) in contrast to the rest of humankind”, and community as “a collective formed by individuals with similar identities”. Anderson (1983) surmised that all communities are “imagined” i.e., built around an arbitrary identity that members share while outsiders do not. Therefore, identity-based inclusion (of “others like me”) and exclusion (of “outsiders”) are an integral part of community building. Imagined identities are enforced by community idiolects (Anderson, 1983) – if you do not speak the same “language”, you are “out” (of the group). The rhetoric (e.g., jargons, in-jokes, memes etc.) that permeate video game communities is, thusly, a form of idiolect. Further social science literature asserted that, in the age of the “cultural supermarket” (Mathew, 2000), consumers influence their own identity through their choice of brands, and that communities formed around consumer brands exhibit “markers” similarly to “traditional” (e.g., national or ethnic) communities i.e., consciousness, rituals, traditions, and moral responsibilities (Muniz & O’Guinn, 2001).

Community discourse in the videogame industry appears to reinforce Anderson (1983)’s, Mathew (2000)’s, and Muniz & O’Guinn’s (2001) assertions. Mohammad (2020)’s study demonstrated that player empowerment (e.g., interacting with other players and voicing feedback to developers) results in stronger brand communities, which in turn leads to greater player satisfaction (and ultimately sales) e.g., Minecraft which is considered a game created “as much as by the developer as by the fans” (MacCallum-Stewart, 2013). Marketing-driven AAA developers, therefore, often seek to broaden their player base as widely as possible by broadly targeting every market segment to generate utility.

In recent years AAA developers have made a concerted effort to diversely market outside of stereotypical gamers – both through the increased representation of women, LGBTQ+, and ethnic minorities (Webb, 2020) and by including “casual” difficulty levels for less-skilled gamers. The demographic widening of gaming communities, in turn, caused some pre-existing gamers to respond with exclusionary community idiolects (e.g., “go woke or go broke” and “dumbing down” respectively), to gatekeep their narrowly defined identity (Bergstrom, 2019; Lopez-Fernandez et al., 2019). This exclusionary behaviour is observed more prevalently in the indie segment, due to the perceived creative-integrity versus commercialism dilemma (Styhre & Remneland-Wikhamn, 2020).

Exclusionary gamer identity can form around any imagined trait. Some successful IGDs build their brand by cultivating an exclusionary identity among a narrow subset of the audience. E.g., Darkest Dungeon leveraged on its “punishing” difficulty. Undertale leveraged on its “retro” 16-bit graphics and midi soundtrack. And Dream Daddy leveraged on its LGBTQ+ representation. Conversely, appealing to consumers’ “us vs. them” mentality may empower a narrow brand community but alienate a wider audience, branding a game “too hard”, “too ugly”, or “too gay” etc. for mass consumption. Therefore, AAA developers rarely employ exclusionary strategies. However, Berger et al. (2010)’s study suggested that such “negative (exclusionary)” brand information improves sales for IGDs with low brand awareness (but limits sales for established AAA developers whose brand awareness is high). Yu et al. (2018) found that “negative (exclusionary)” brand information damages short-term attitude towards the brand but has no long-term negative effect on brand image. Both studies may seem contradictory at first

glance but point to the traditional marketing wisdom – “there is no such thing as ‘bad publicity’”, especially if you are a first-time IGD with no brand community to lose.

Communications literature (Berlo, 1960) suggests that inclusion/exclusion happens at two levels i.e., Receiver and Message. Thus, DevComs’ intended receivers may be broad or narrow, whereas the message itself may be inclusionary or exclusionary. Who receives what type of message and the rhetoric the message contains then interplay with their identity and how they react to the brand and community, either drawing them in or pushing them out of the community (Brown et al., 2018; Cui et al., 2018).

The pushes (i.e., exclusion) and pulls (i.e., inclusion) of intra-brand community dynamic are further complicated on digital platforms e.g., Steam, which utilize algorithms to curate and market products. Wallace (2018) coined the term “digital gatekeeping” i.e., a decentralized process where algorithms and non-professional users co-decide which content reaches the highest visibility. This model applies especially well to Steam, which functions both as a digital distributor and a social platform. Styhre (2020) opined that a “mass of clicks” – measured in terms of user reviews, wishlisting, discussion, fan art etc. – is crucial to achieving platform visibility. Zुकalous (2021c) estimated this “mass of clicks” to be “5,000-10,000 wishlists, 10 reviews, or both”, without which a game will be hidden by the Steam algorithm. Wallace’s (2018) model also mirrors Hukal et al.’s (2022) IGD “strategy playbook” in two ways: 1) IGDs in the long tail of platform distribution can boost their game’s discoverability by “rallying grassroots (i.e., players’) support” and 2) from the platform’s perspective, IGDs create value by allowing them to target the gamers who excluded themselves from the mainstream market. While platforms are typically opaque about their algorithms, we can infer that Steam, like other social media platforms, have an interest in creating “echo chambers” and “filter bubbles” to maximize consumption behaviour (Kitchens et al., 2020) – a reality that IGDs could take advantage of to build an exclusionary brand identity and, subsequently, a leverageable community.

The marketing and social science studies we reviewed revealed a literature gap in the sense that they present IGDs with complex and contradicting implications – firstly, game development and distribution should include a wider community to generate utility; secondly, indie gamers can be exclusionary. And indie games must strongly differentiate from the wider community to maintain their identities; lastly but not least, decentralized digital gatekeeping necessitates that IGDs balance the interest of not only players but also platform algorithms. To that end, we expect IGDs, at least the successful ones, to employ a dichotomy of community building tactics: using broadly targeted or inclusionary DevComs to grow community size (at the risk of diluting identity) while using narrowly targeted or exclusionary DevComs to maintain identity (at the risk of limiting community size). To bridge the gap between social science literature and social media marketing literature, we attempt to answer the questions of “when” and “how” to use “which” marketing tactic, using a deductive coding scheme to guide our rhetorical analysis (Section 3.2).

3 Methodology and Research Design

3.1 Data Collection

We collected data by scrapping tweets from IGDs’ official Twitter accounts from account creation until the launch date of their respective first games. We needed indie games without any prior brand community for this study (Styhre, 2020). Therefore, our selection criteria were: 1) the first game developed by the IGD, 2) not free-to-play (hence requiring buy-in commitment from the community), 3) sold as either a completed product or in a playable beta condition; and 4) self-published by the IGD. To ensure that our sample represents a broad spectrum of success and lack thereof, we systematically measured a game’s launch-week success using a quadrant based on unit sales and review scores. We obtained sales and review data through Steam Club 250 (2021), a third-party API that publishes weekly sales estimates. As no historical sales data is available, we assumed that a similar percentage of customers leave reviews for a product over time (Charless, 2020) and used the formula (based on reviews written in or before June 2021):

$$\text{Extrapolated launch week unit sales} = \text{Current unit sales} \times \frac{\text{Launch week number of reviews}}{\text{Current number of reviews}}$$

We systematically sampled a wide range of successful and unsuccessful games. These games were identified through Steam’s social index function, where games are indexed through community-generated tags. And we searched for games tagged as “indie”. The gaming community measures success mainly using two metrics – commercial sales and critical reviews.

We defined commercial success as 50,000 units sold during launch week. Birkett (2018) anecdotally approximated that indie game first-year sales range from 2x to 10x of launch-week sales. We took the medium (5.1x) where 50,000 launch-week sales projects to 255,000 first-year sales. We acknowledge that indie game pricing and development models are highly varied and estimated that 255,000 units sold are enough to recoup the cost of the first game and fund a second for a 4-person IGD team that take 3 years to develop a 20 USD game based on anecdotal experience, in lieu of reliable data sources.

We defined critical success as $\geq 80\%$ positive user reviews on Steam, which indicates a “positive” or better critical reception (Doucet, 2014). We plotted our sampled games on a matrix (Figure 1) and sampled games from each quadrant. In total, 31 games were added to the sampling matrix until we deemed that a saturation point had been reached.

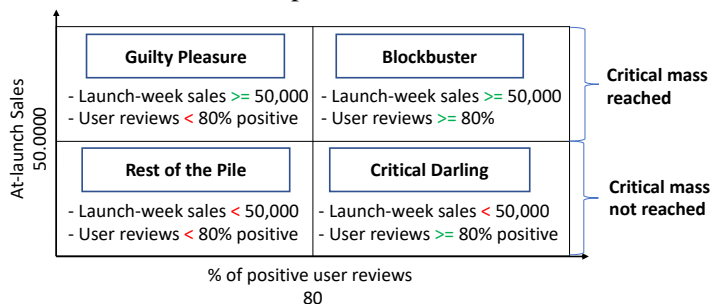


Figure 1. Success-classification quadrants for sampling

3.2 Rhetoric and Thematic Analysis

The scraped data were analysed tweet-by-tweet according to thematic codes derived from ‘inclusionary’ or ‘exclusionary’ messaging. Inclusion is based on the ideals of community empowerment and drawing people to the game. While exclusion denotes a rejection from mainstream positioning. The DevComs were also coded based on their target audience being ‘broad’ or ‘narrow’. We coded messages neither inclusionary nor exclusionary in nature or generally unrelated to gaming as ‘None’. The five codes are thusly: ‘Broadly Exclusive (BE)’, ‘Broadly Inclusive (BI)’, ‘None (N)’, ‘Narrowly Exclusive (NE)’, and ‘Narrowly Inclusive (NI)’ (Figure 2):

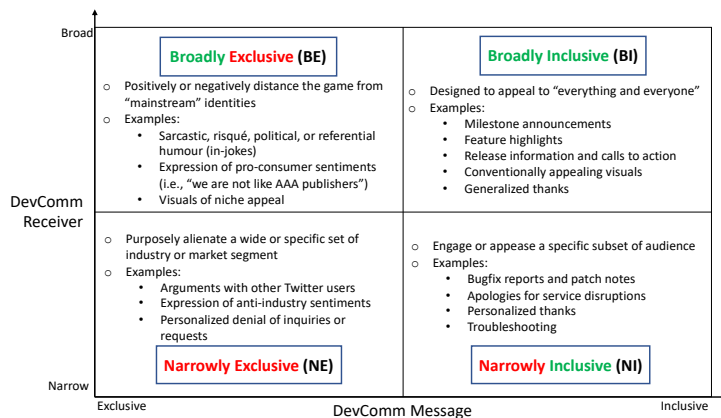


Figure 2. Rhetoric coding quadrants for deductive coding

An example of a broad tweet would be a feature announcement that highlights a popular feature aimed at drawing in a wide audience e.g., an appealing new “character class” or similar features. Whereas an example of a narrow tweet would be a bug-fixing patch note on specific improvements to a game’s user interface. These tweets are considered narrow because general audience members who have not bought the game are unlikely to find them interesting.

An example of an inclusionary tweet would be a piece of character art posted by Hollow Knight, whose characters are based on real-life arthropods but are cartoonish enough to not require an interest in bugs to be aesthetically pleasing. Whereas an example of an exclusionary tweet would be a 3D model of a Kaposuchus posted by ARK, an obscure Cretaceous crocodylian that generates excitement from palaeontology enthusiasts but may confuse the general audience.

To maintain inter-coder consistency, the codes were harmonized between the analysts with details and exemplars. The analysts coded one initial game separately, then met to discuss differences to ensure a base level of understanding before coding the remaining data. The analysts also met periodically to discuss and refine the codes for subsequent games.

Along with the primary coding, secondary (latent) codes and notations were made by the analysts for the identification of themes and trends in the rhetoric that could later be refined into exemplars of the rhetorical content and when this content appears in an IGD’s communication campaign. The coded data were then plotted over a timeline (i.e., starting from launch day and tracing back to the time of the first DevCom tweet) to further solidify the patterns discovered as part of the thematic analysis.

4 Findings

We expected to find IGDs using significant quantities of exclusionary rhetoric to reinforce their brand’s identity and thus attract individuals whose self-image fits the brand. When coded data were aggregated and plotted over the development timeline, we found that NI tweets made up most of the DevComs sampled. As discussed in Section 2, inclusionary tweets are expected to grow brand community size, whereas narrow tweets are expected to maintain brand identity. NI tweets, therefore, balance both goals. Furthermore, there were marked differences in the quantity of tweets between commercially successful games, and lack thereof (Table 1):

Quadrant	# of Games Analyzed	BI		BE		NI		NE		N		AVG # of Total Tweets
		AVG # of Tweets	%	AVG # of Tweets	%	AVG # of Tweets	%	AVG # of Tweets	%	AVG # of Tweets	%	
Blockbuster	8	121	19%	10	2%	462	72%	42	7%	9		644
Critical Darling	9	41	39%	2	2%	38	36%	2	2%	21		105
Guilty Pleasure	9	399	35%	35	3%	637	55%	37	3%	41		1,149
Rest of the Pile	5	75	32%	2	1%	151	65%	2	1%	2		232

Table 1: Overall tweet distribution of sampled games

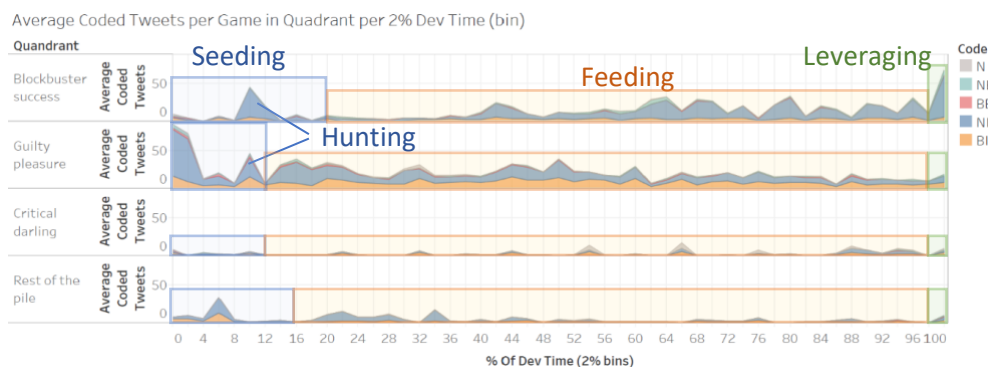


Figure 3. Patterns of ‘The SHuFL Model’ across the quadrants

We found that successful releases follow a pattern (see Figure 3) – which we dub ‘The SHuFL Model’ – that consists of four phases of communication: ‘Seeding’, ‘Hunting’ (optional), ‘Feeding’, and ‘Leveraging’.

4.1 Seeding

The first phase, ‘Seeding’ happens at the beginning of the campaign. These tweets typically vary from being BI to personal tweets directed at seemingly random Twitter users in the IGD community. This phase usually completes itself when developers start consistently getting direct responses to tweets, after which IGDs shift to the next phase (‘Feeding’). Typical ‘Seeding’ tweets are characterized by either the use of hashtags, screenshots, and clips; or non-game development-related personal tweets as illustrated in Figure 4 from *Stardew Valley*:



Figure 4. *First three Tweets from ConcernedApe, developer of Stardew Valley (‘Blockbuster’)*

The goal of ‘Seeding’ is to move into the ‘Feeding’ phase (discussed in Section 4.2). Hashtags e.g., “#screenshotsaturday” or “#IndieGameDev” may help speed up the transition, as *Hollow Knight*, who used hashtags, reached the ‘Feeding’ phase in 2-3 months (see Figure 5). However, hashtags were not shown to be a requirement. *Stardew Valley*, for example, reached the ‘Feeding’ phase in approximately 14 months without hashtags, as opposed to the hashtag-using *Slay the Spire* (c.a. 16 months).

The ‘Seeding’ phase exists for most of the games analysed, longer for some and shorter for others. However, unsuccessful games tended to have a relatively low quantity of ‘Seeding’ tweets compared to ‘Blockbusters’ and ‘Guilty Pleasures’ (see Figure 3) – if they even consistently used Twitter at all, which games in the ‘Rest of the Pile’ often did not.

4.1.1 Hunting

An optional phase called ‘Hunting’ was identified in some DevComs, especially the ones that had a crowdfunding campaign. The IGDs would typically initiate conversations with NI and NE tweets (using “@mentions”), targeting either specific personalities with established audiences (streamers, influencers, etc.) or seemingly random community members who expressed interest, in very large quantities. An example of ‘Hunting’ is seen in *Hollow Knight*’s campaign, which may explain its speedy transition to ‘Feeding’ (Figure 5).

‘Hunting’ behaviour is distinguishable from ‘Seeding’ in that the latter is somewhat consistent activities over a sustained period, whereas the former are usually short bursts of hyperactivity. ‘Hunting’ tweets are often proactive NI “calls to action” e.g., asking specific influencers to stream the game, offering CD keys to reviewers, etc, as seen in Figure 5:



Figure 5. *Three ‘Hunting’ tweets from Team Cherry, developer of Hollow Knight (‘Blockbuster’)*

‘Hunting’ behaviour is distinguishable from ‘Seeding’ in that the latter is somewhat consistent activities over a sustained period, whereas the former are usually short bursts of hyperactivity. ‘Hunting’ tweets are often proactive NI “calls to action” e.g., asking specific influencers to stream the game, offering CD keys to reviewers, etc, as seen in Figure 5.

4.2 Feeding

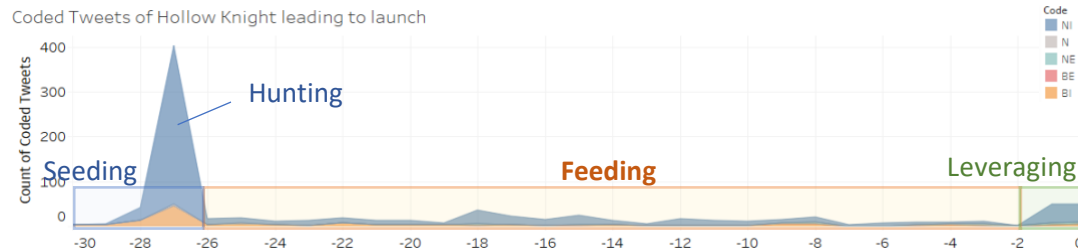


Figure 6. *Coded Tweets of Hollow Knight’s campaign (‘Blockbuster’)*

The ‘Feeding’ phase (illustrated with Hollow Knight, Figure 6) is signalled by a sustained period of DevCom activity cycling between BI and NI tweets, usually paired with tweets by the community in an asynchronous-in-time and asymmetrical-in-quantity manner. In this pairing, the community is ‘fed’ broadly targeted tweets typically via progress updates on game development (“dev logs”), new feature announcements, retweeting fan art, or giveaways. All these BI and BE messages aim to foster more awareness of the game for an audience at large. Examples of such BI tweets can be seen in both The Forest and Hollow Knights’ Campaigns (Figure 7):



Figure 7. *‘Feeding’ style tweets from Endnight Games, developer of The Forest (above), and Team Cherry Games developer of Hollow Knight (right), both ‘Blockbusters’*

These BI tweets trigger responses from individuals in the community, to which the IGDs then respond directly in a NI manner – hence the asynchronous and asymmetrical pairing. The narrowly-targeted responses cover a wide range of topics – from general troubleshooting, thank-yous for supporting the game, bug-fix patch notes, acknowledging feedback and suggestion, to otherwise interacting with a specific person. These tweets are only of interest to players who already bought or have shown interest in the game or brand community. So, the primary function of this type of NI DevCom is to strengthen the already existing bond within the community, helping to create a positive network effect via feedback loops.

An example of ‘Feeding’ tweets can be found in Cube World’s (‘Guilty Pleasure’) campaign (Figure 8):



Figure 8. *Two Narrowly Inclusive style ‘Feeding’ tweets from Wolfram von Funck, developer of Cube World (‘Guilty Pleasure’)*

It is also common to find in this phase BE and NE tweets, usually as a form of expectation management e.g., transparency of what the game will and will not be, whom the game caters to (or does not), differentiation from AAA games, selling through reverse psychology, etc. Examples of this can be seen in *Slay the Spire*'s campaign (Figure 9).

The 'Feeding' pattern is well-demonstrated in the commercially successful games analysed ('Blockbusters' and 'Guilty Pleasures'), where the quantity of NI messages increases steadily over time (indicating increased engagement) and consistently stays above BI tweets in quantity (Figure 3). This pattern reiterates that broadly targeted DevComs should be designed to solicit users who will answer or give feedback and open up further interaction. Even when the initial announcement was exclusionary, it will still generate NI interactions (demonstrating the in-and-out-group dynamic). This cycle is repeated throughout the 'Feeding' phase in a loop within which NI DevComs increase steadily as the network effect takes hold. Only the 'Critical Darlings' in our sample did not actively and continuously 'feed'



Figure 9. Two Narrowly Exclusive style 'Feeding' Tweets from MegaCrit, developer of *Slay the Spire* ('Blockbuster')

their communities over time (Figure 3). And the overall number of tweets in this quadrant is low compared to the commercially successful categories. This solidifies the assertion that it is the 'Feeding' phase that drives community engagement (and ultimately sales). In other words, our analysis shows that even if you have developed a critically acclaimed game, it will still fail to launch if you failed to enter the 'Feeding' phase.

4.3 Leveraging

The final phase is 'Leveraging' (Figure 10):

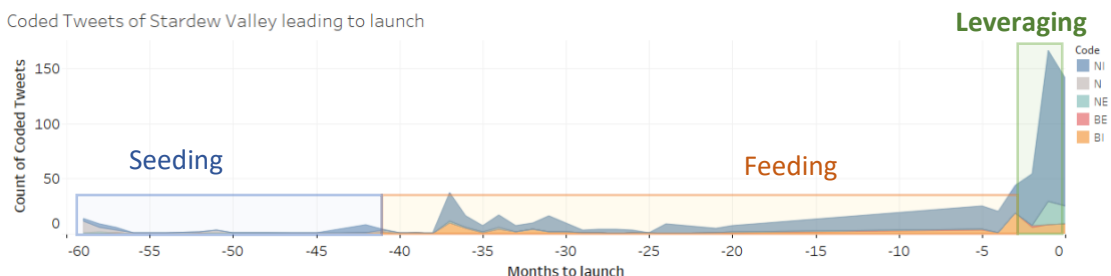


Figure 10. Coded Tweets of *Stardew Valley*'s campaign ('Blockbuster')

This period is usually characterized by a sustained spike of BI and NI tweets leading up to launch. These tweets are mostly used to advertise the upcoming release of the game, with a focus on announcing the release date and platform availability. The focus of this phase is to leverage the community previously fostered during 'Feeding' to either buy the game on-release and, more desirably, tell their network to buy it (i.e., "call-to-action"). By this point, the IGDs have successfully initiated a positive feedback loop (Shapiro & Varian, 1999) – before the game is even released. Examples of this can be seen in *Stardew Valley*'s campaign (Figure 11):

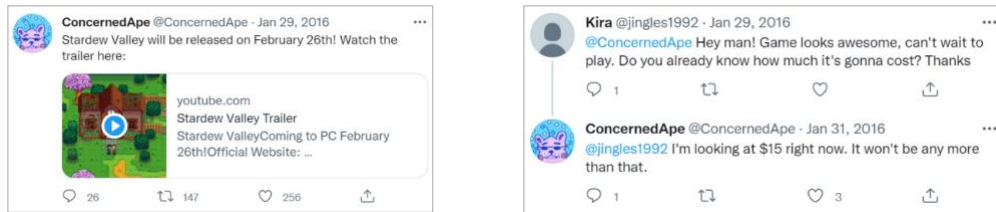


Figure 11. A Broadly Inclusive (right) and Narrowly Inclusive (left) ‘Leveraging’ Tweet from ConcernedApe, developer of Stardew Valley (‘Blockbuster’)

A final consideration is made between the ‘Blockbuster’ and ‘Critical Darling’ categories. Even though they both have high review scores, the number of “call-to-action” tweets in the ‘Critical Darling’ quadrant was significantly lower and their games remained little-known. Consequently, the lack of ‘Feeding’ and ‘Leveraging’ results in lower sales.

4.4 Summary

Figure 12 shows a summarisation of ‘The SHuFL model’, where the phases are shown relative to the total pre-release development timeline:

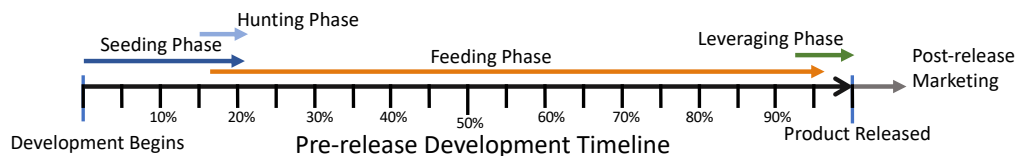


Figure 12. Illustration of 'The SHuFL Model' timeline

5 Discussion

We began our study by considering the seemingly contradictory community-building suggestions of using 1) broadly targeted or inclusionary DevComs (to grow brand community size) and 2) narrowly targeted or exclusionary DevComs (to strengthen brand identity), which we assumed would be dichotomous. Our findings indicated that successful games, both in terms of perceived quality and commercial achievement, tend to follow a pattern of communications we call ‘The SHuFL Model’. This pattern indicates that the dimensions are complementary, and IGDs construct messages that use combinations of broad/narrow and inclusionary/exclusionary DevComs at different points in time. This is an interesting development and offers theoretical and managerial implications that we will now explore.

5.1 Theoretical implications

The ‘Blockbuster Successes’ in our sample used 72% NI tweets, and 19% BI tweets, indicating significant use of inclusionary DevComs (Table 1). The prominence of inclusion implies that individual games’ brand communities exist inside a more general ‘gamer’ super-community. Here, each brand executes its moral responsibility to invite others in the greater sub-culture into their brand community using inclusionary messages (Muniz & O’Guinn, 2001). This suggests that identity and community memberships are not mutually exclusive, where identifying with one community means forgoing another, but instead a layering and intersection of communities is more appropriate. Intersectional communities challenge the established notion of communities’ “us vs. them” dichotomy (Muniz & O’Guinn, 2001).

This intersectionality is where the “cultural supermarket” (Mathew, 2000) comes into play i.e., brand identities are expressed by consumer choices. In other words, the indie game community is an umbrella under which nests individual, smaller brand communities dedicated to each indie game. And these

communities' memberships are fluid within each other. The effectiveness of NI tweets is likely amplified by algorithmically-created "echo chambers" and "filter bubbles" – where players of indie games are recommended more and more indie games (Kitchens et al., 2020). These gamers are not only more likely to buy another indie game but also pass on word-of-mouth, hence the effectiveness of the 'Leveraging' phase – i.e., those in the super-community support other sub-communities.

The 'Guilty Pleasures' in our sample have a closer split between BI and NI tweets (35% vs. 55%) (Table 1). Their lower review scores may be the combined result of 1) inherently lower quality of the game and 2) lack of strong brand identities leading to fewer brand-empowered players who leave positive reviews (Mohammad, 2020; Panigyrakis et al., 2020). As 'Guilty Pleasures' collectively lack a pronounced 'Leveraging' phase (Figure 3), using more BI DevComs than the 'Blockbuster Success' quadrant may indicate compensation for the lack of perceived quality and empowerment. Narrow communications would solidify the game's identity, but the lack of quality may indicate a weak identity, thus requiring more solicitation of the greater community for interest in the product. This may paradoxically also cause more negative word-of-mouth to spread, as more social hubs get caught in the loop (Cui et al., 2018). In contrast, the higher perceived quality of the 'Blockbusters' may afford better targeting of early adopters (Cui et al., 2018) through NI communications who then aid construction of echo chambers and community idiolect (Anderson, 1983; Kitchens et al., 2020; Muniz & O'Guinn, 2001) – leading to both commercial and critical success. Without a clear target audience defined by community idiolect, i.e., narrowly targeted DevComs, the Steam and Twitter algorithms cannot accurately match the game to their respective echo chambers.

As for 'Critical Darlings' (Figure 3), these games' critical success yet commercial failure points to the "indie" segment's creative integrity vs. commercialism trade-off (Styhre & Remneland-Wikhamn, 2020). Even though their products are considered high quality, these IGDs may have considered that posting regularly to Twitter signifies commercial intent, thus violating the anti-mainstream and anti-commercial ethos prevalent in this segment. Conversely, the inclusion dynamics of 'Feeding' we find in DevComs support the notion that a consumer seeks fun and amusement, which coincides with combinatorial play and consumption of the mind (Brown et al., 2018). Meaning that in the marketing sense, inclusion to a brand community is also an invitation to 'play', or put simply, to enjoy the product on offer. Thus, IGDs that seek to capture a large audience may not need to compromise on creative integrity to enjoy commercial returns but simply invite the greater community into their creativity, as we see in the 'Blockbuster' and 'Guilty pleasure' quadrants. Alternatively, 'Critical Darling' developers may have chosen to allocate their finite resources and time on further developing the game rather than marketing it on Twitter.

Further supporting this inclusion-as-invitation idea is the asynchronous and asymmetrical pattern identified in the 'Feeding' phase, whereby a BI DevCom attracts multiple responses from the community, which the developer then re-engages in a NI manner. We theorise that this subsequent reply from the IGD is what establishes a self-brand relationship (Panigyrakis et al., 2020) between the IGD and the public. Simply engaging with a member of the public that shows interest in a brand, is enough to begin the formation of consciousness of kind and brand attachment, which can later be leveraged (Muniz & O'Guinn, 2001). This indicates that commercial success for the IGDs that feel constrained by the creative norms of the "indie" segment is a matter of dialogue and need not compromise the underlying anti-commercial ethos (Styhre & Remneland-Wikhamn, 2020).

5.2 Managerial implications

Our findings indicate that to build a weaponizable (in terms of a "mass of clicks") community before launching a product on a gatekept platform, firms should structure a social media marketing campaign following the four 'SHuFL' phases: 'Seeding', 'Hunting', 'Feeding', and 'Leveraging'.

Whilst our study focused on IGDs, our findings carry over to other industries similar in nature, such as software development, entertainment, and art production. 'The SHuFL Model' is generalizable to platform complementors in the long tail of digital distribution, social, and crowdfunding platforms (e.g.,

AppStore, Amazon, and Kickstarter) aiming to tap into the cycle of algorithmic push. For example, software developers can tailor their DevComs using ‘SHuFL’. In their ‘Seeding’ phase, they can bring attention to the founders and background stories behind their team. In ‘Hunting’, they can select key industry figures – tech journalists, opinion leaders, and early adopters – and reach out to them directly and publicly to support the team and track the product roadmap as features are developed. In ‘Feeding’, they can build trust in their team and product by showcasing development transparency and milestones, soliciting community feedback, incorporating it into their product roadmap, and perhaps most importantly, reinforcing individuals’ support through NI DevComs. Finally, this pre-release community can be ‘Leveraged’ when the product is nearing official launch by calling the community to action. This generates the “mass-of-clicks” that signals engagement and draws favourable attention from platform algorithms that monitor engagement.

Outside of digital innovation, ‘The SHuFL Model’ is generalizable to “grassroots” marketers with limited resources e.g., social movements kickstarted by activists or an offline creative product, e.g., a board game. In these cases, the platform used to generate the community may not be Twitter, but LinkedIn or Facebook, and the commerce platform may not be Steam, but Amazon or a proprietary website (in which case the “mass of clicks” will be measured in different indicators e.g., affiliate links or web traffic etc.). In any case, we expect ‘The SHuFL Model’ to be adaptable to a variety of industries and social norms as our sample showed DevComs of informational, entertainment, and personal natures all contribute to the success of a product.

5.3 Limitations and Improvements

We acknowledge COVID-19 as a confounding factor as sales of video games on Steam rose dramatically during lockdown (Clement, 2021c). The data we collected for analysis were not longitudinal, but a cross-sectional estimation extrapolated from Steam Club 250 (Section 3.1). Therefore, the launch sales of our sampled games may have been inflated by the pandemic. Games released before or during the pandemic likely sold more units than they would within the same timeframe under normal market circumstances, in turn resulting in higher launch sales estimates in our sample. However, this inflation effect should affect all games in our sample equally.

The relative newness and complexity of the gaming industry contain potential confounding factors. ‘The SHuFL Model’ is based on data collected on two platforms, Steam and Twitter. The gaming industry consists of multitudes of hardware (e.g., PC, mobile, and consoles), distribution (e.g., Steam and Amazon), and social (e.g., Twitter and Twitch) platforms. The lack of granular market data for each platform, combined with our singular source of data estimation (Steam Club 250), led to a possibility of skewed results. For example, our definition of 50,000 launch-week unit sales for commercial success was arbitrary. Future studies in game development may produce statistical models that improve our estimates. Furthermore, future studies on other platforms may lead to other engagement patterns that influence ‘The SHuFL Model’.

Our single round of coding used a deductive approach. Having only five categories enabled us to code a large number (17,599) of tweets. Throughout the coding process, we made inductive discoveries that resulted in more granular sub-categories under each of the four quadrants. Future studies may refine ‘The SHuFL Model’ by incorporating further inductive coding that granularize these sub-tactics developers employed during the ‘Seeding’, ‘Hunting’, ‘Feeding’, and ‘Leveraging’ phases. In the same vein, dedicated research focusing on each phase of the Model can reveal more about their respective nature, implementation challenges, boundaries, transitions between phases (and their length), and use of the hashtags. In our study, we merely identified the phases in terms of inclusion versus exclusion and broad versus narrow audience targeting. We fully acknowledge that more needs to be done to understand this model at a deeper level and encourage future research to investigate this model, especially in light of other potentially contradictory or complementary theories.

6 Conclusion

Our research question concerns how first-time IGDs at various levels of success managed (or failed) to build a leverageable community from scratch. Our review of existing marketing and social science literature revealed a dilemma for IGDs – between the inclusion of a wider brand community (MacCallum-Stewart, 2013; Mohammad, 2020) and maintaining exclusionary brand identity (Berger et al., 2010; Styhre & Remneland-Wikhamn, 2020; Yu et al., 2018) in the decentralized platform environment (Hukal et al., 2022; Kitchens et al., 2020; Wallace, 2018). Conversely, the Developer Communication (DevCom) strategies and tactics employed by IGDs are highly varied (Hill-Whittall, 2015; Styhre, 2020; zukalous, 2021a, 2021b). We attempted to answer the research question by investigating “how” and “when” first-time IGDs use “which” DevCom tactic(s). To do so, we reflected on marketing and social science literature to synthesise a dichotomy of exclusionary versus inclusionary messages and broad vs. narrow audiences. This resulted in deductive codes used to analyse IGD DevComs: Broadly Inclusive (BI), Broadly Exclusive (BE), Narrowly Inclusive (NI) and Narrowly Exclusive (NE).

Our investigation uncovered a pattern consisting of common phases prevalent in games that achieved a “mass of clicks” (Styhre, 2020; zukalous, 2021c) on release. These phases are summarized as ‘The SHuFL Model’ – ‘Seeding’, ‘Hunting’, ‘Feeding’ & ‘Leveraging’. ‘Seeding’ is a phase at the beginning of a campaign that usually involves broadly targeted or personal statements aiming to raise the game’s discoverability. ‘Hunting’ is an optional phase between ‘Seeding’ and ‘Feeding’, in which IGDs proactively and narrowly engage specific members of the indie game community in large volumes to achieve the same purpose as ‘Seeding’ – to enter the ‘Feeding’ phase. ‘Feeding’ is characterised by sustained cycles of asynchronous and asymmetrical BI announcements, and the multiple NI community responses that arise from these announcements. These cycles of BI announcement-NI responses help create positive feedback within the game’s brand community. The final phase, ‘Leveraging’, engages the community built during ‘Feeding’ and calls on them to act – not only to purchase the game but also spread the word-of-mouth. If executed successfully, platform algorithms should assume the game to be profitable and enforce the “echo chambers” and “filter bubbles” within and around the brand community, amplifying the positive feedback loop.

Of the 31 indie games and 17,599 tweets we sampled and analysed, the ‘Feeding’ phase appears prominently in commercially successful games. And here are some of the tactics that led to a successful transition, summarized from ‘Blockbuster’ and ‘Guilty Pleasure’ games: 1) begin the Twitter campaign early with personal tweets (even before a prototype is available); 2) maintain DevCom consistency and volume throughout ‘Seeding’ and ‘Feeding’ phases, 3) strategic use of NI tweets to accurately narrow down target audience (simultaneously strengthening existing brand identity).

Commercially successful games showed a higher convergence to ‘The SHuFL model’. Throughout our sample, the key attribute that distinguishes commercially successful games is their ability to transition from ‘Seeding’/‘Hunting’ into the ‘Feeding’ phase. Games that are also critically successful tend to focus on ‘Feeding’ and ‘Leveraging’ – a subset of their established community and achieved a higher level of engagement with relatively lower numbers of tweets, while commercially successful games that received middling or below critical ratings did so by appealing to the wider audience through mainly-BI rhetoric.

Armed with ‘The SHuFL Model’, developers can now approach community-building with structure and confidence, reducing risks associated with product-development, leading to more ‘Blockbusters’ and keeping their products from joining the ‘Rest of the Pile’. With ‘The SHuFL Model’ developers now know “what” to say, “how” to say it, and “when”.

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