'If you are feeling bold, ask for \$3': Value Crafting and Indie Game Developers

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ABSTRACT

This paper explores the practices that indie developers deploy to manage the risks they encounter while making, marketing, and selling games. Building on concepts such as indie labour (Browne 2015) and theory-crafting (Paul 2011), this paper explicates the concept of value crafting as a better way to understand indie game developer practices. Indie developers engage in value crafting as a way to construct the value of their game and to sell it to a wide audience. This is reflected in debates about the pricing of indie games - there is no agreed upon standard for contemporary indie games, with price points now ranging from free (with or without in-app purchases) through \$30 for individual games. Alongside the uncertainty of how to price a game, developers formulate elaborate marketing plans for various stages of their work, which can include running a Kickstarter campaign, promoting their game via social media, creating, moderating and participating in fan forums, gaining Steam Greenlight access, whether or not to release their game on Early Access, releasing demos, pitching their game to game journalists and local media, finding YouTube and Twitch personalities to play and promote their game, and many other activities. Indies who do all of these things also engage in lengthy discussions with one another to share information, incorporating detailed charts, graphs and statistical analyses. These post-mortems of their activities attempt to explain a game's success or failure, as well as to rhetorically construct a particular activity as successful in some way even if sales figures are low- so it might lay the groundwork for future games, it builds a fan base, it teaches valuable lessons learned, and so on.

Keywords

Game development, indies, game pricing, game value, Steam

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INTRODUCTION

For independent game developers, particularly small teams and studios, making and selling videogames involves a set of skills quite different from coding, art and sound creation as well as overall game design. Increasingly such developers (or 'indies') must be versed in marketing, team management, analytics, community building and management, and general business acumen. Teams are now responsible for not just making a new and innovative game, but pricing it, determining its release date, whether to allow early access (alpha and beta testing) to potential players, how to manage their game's community, how to negotiate with publishers, how to garner media attention, and how to get their game funded in the first place. And just as their jobs have multiplied, the options for these various responsibilities have multiplied as well. This paper is a preliminary investigation of how a subset of indie developers talk about these responsibilities and how they negotiate the risks involved. In doing so, this paper adds to our understandings of the videogame industry (particularly indie studios), as well as how the business of games is evolving in complicated ways.

A (SELECTIVE) HISTORY OF THE BUSINESS OF GAMES

There were no business models or marketing plans for the earliest videogames- they were free to play – if you were luck enough to have access to computers like the PDP-1 at elite North American universities. As games developed, a business model emerged – games for PCs might be sold via diskette in plastic baggies at a local Radio Shack (or similar electronics store) or you could seek out arcades or just singular game cabinets that accepted quarters (or tokens) to enable a limited play period – usually until the player lost a certain number of game 'lives.' Only recently have game scholars begun paying much attention to the history of arcades: Carly Kocurek's recent book on arcades in America in the 1980s is a notable exception, detailing for example how the value of a quarter declined almost 50% from 1972 to 1983, and what that meant in material terms for arcade game players at those times (Kocurek 2015). Yet Kocurek's focus is on arcade operators and patrons, and not the developers who made the games or profited (or not) from them. In most recounting of early game history there is no discussion of differential pricing, or how to value the labor of developers in relation to the products they created.

Even as the games industry became more popular and academics took notice of the rise of home console systems in the 1990s, the business of games has not been a major focus of scholars. Yet we can see some discussion of the economics of games starting to emerge at that time. In 1991 Marsha Kinder's *Playing With Power* offered a detailed study of the rise of the games industry and how it was being integrated into a transmedia industry focused on children's entertainment (Kinder 1991). As a lead in she discusses Nintendo's financial strategies – explaining their adoption of the "razor marketing theory" that had already been introduced "into the toy industry in 1959 by Mattel with the Barbie doll – a strategy of focusing on the development and sale of software (whether a game cartridge, a Barbie outfit, or a razor blaze) that is compatible only with the company's unique hardware," where the cost of the hardware is kept low to promote more software sales to repeat customers (91).

Later scholars such as Aphra Kerr have further explored the business models of videogames over the next decade and a half, which were limited by the predominance of particular distribution channels such as proprietary console systems as well as limited shelf space in brick and mortar storefronts (Kerr 2006). More recently the rise of 'studio studies' in game studies has called attention to the developers who make games, who have often worked under shrouds of secrecy due to industry practices that value

Nondisclosure Agreements to maintain competitive advantage as well as control over creative content (O'Donnell 2014). An upshot of that work is Casey O'Donnell's flagging of the difficulty game studies researchers have had in gaining access to traditional developers, who either cannot or are reluctant to speak with anyone outside their studios about the work they do there (2014).

Yet with the rise of new platforms for distribution such as Steam, and the reduction in price of development tools (such as Unity and Unreal Engine becoming freely distributed), we have witnessed an explosion of 'indie' developers, who in addition to creating games outside the closed system of consoles, have also been much more forthcoming among themselves and with 'outsiders' about the business of games and their own efforts to make and sell titles (Whitson 2012).

The practices which indie developers engage in – game making, marketing and selling – are constantly being negotiated and renegotiated as platforms, player demographics, tools, business practices and regulations all constantly shift and evolve. One key constant in that flux, however, is managing risk. Others have begun to explore that activity, including Pierson Browne's study of Montreal games incubator Execution Labs and the game studios it has supported (Browne 2015). From that work Browne developed the concept of "indie labor," which comprises a set of strategies for managing the risks faced by small development studios as they create and release games over and above activities such as art asset creation, level design, game programming, and so on. Indie labor, Browne argues, is affective as well as economic; those who engage in indie labor envision it as "an investment in both their studio, as well as the broader imagined community" that surrounds them. Browne further contends that indie laborers "manage risk through talk" and see their efforts as "an investment in both their studio, as well as the broader imagined community" of indie game development.

Part of the work of indie labor, we argue in this paper, is what we term value-crafting. Value-crafting encompasses certain aspects of indie labor, particularly those related to determining how best to value their creative products and build out a space for them and then successfully market them to players. It includes determining what business model to use for a particular game, how to price that game, how to raise funds for game development, how, when and where to release the game, and other factors. Chiefly it includes anything that relates to the valuation of the game, which may or may not be a traditional element of game production. It is also a practice practiced in the black box of the contemporary game industry, which has multiple platforms, pricing structures, customer groups, and many other variables. It also builds from work in player studies that examines the activities of high-level players who seek to determine 'best practices' for playing particular games. For that we draw on Chris Paul's explication of "theorycrafting" and how it is based on players' systematic experimentation with gameplay along with a reliance on data and metrics, to achieve optimal play (Paul 2011). Theory crafting attempts to determine the optimal method for advancement or success in a game such as World of Warcraft or League of Legends (Wenz 2013). And as Paul explains, theory crafters often influence how others play, pushing for their strategies to become the normative strategies. Key to this is a reliance on technicity and appeals to science, hypotheses and the 'objectivity' of statistics and numbers (Paul 2011).

So too value-crafting is built on systematic experimentation with game development and marketing along with a reliance on data and metrics, to achieve optimal sales. Yet there is also a critical contradiction at work – while games are perceived as meritocracies and real

life losses for failure to follow formulas are not life changing, for indie developers the stakes are much higher. Further, the urge to fight against the pull of numbers, data and evidence is still evident, as appeals to data and analytics cannot always prevail. Through a detailed case study of the discourse found on the subreddit r/gamedev as well as developer blogs found on the site Gamasutra from 2013 through early 2016, this paper explores and advances the concept of value-crafting, and how it relates to the precarious nature of the contemporary indie game marketplace. It focuses on only two elements of value-crafting due to space constraints- overall pricing dilemmas and strategies, and how Steam functions as a system to navigate – but more will be studied in future work.

GAME x VALUE = PRICE?

Perhaps the toughest issue that indie developers face is setting a price for their game. Unlike AAA studios or publishers there is no default "\$60" price tag to employ, which potential consumers have come to expect, even if they don't welcome it. Instead there is constant disagreement among smaller game developers over how much to charge, or whether to charge at all for a game upfront, instead opting for freemium business models that employ advertising, In-App Purchases (IAPs), or to simply give the game away as a way to promote the studio and build a reputation and community for future game releases.

Indies debate these approaches using a range of strategies, from data-driven post-mortems and platform analyses to more informal gut-level reactions toward what a potential game 'seems' to be worth. Most would agree that the absolute upper limit for indie games is \$30, with precious few mentioning that price as acceptable for their own titles, at least in the data examined for this project. Far more common are debates over whether something 'looks like' a \$5 or a \$10 game, or whether it should simply be free-to-play with an alternate revenue model. Part of this also depends on platform – mobile is seen as oversaturated, with the iOS market in particular creating a playing field where consumer expectations are toward free or –at most- 99 cent games.

For example, one developer posted to r/gamedev in 2014, asking the community to help him determine his game's worth – by which he meant price. The poster explained that he and his friend had just created a mobile game and released it on the Android store, but "we have absolutely no idea about marketing or pricing." Explaining that he and his partner didn't like in-app purchases, he asked for pricing help from the group. Some commenters tried to persuade him to try using in-app purchases, asking why they did not appeal to him or if he had thought about using them in creative ways. Seth from Butterscotch Shenanigans (in the most popular response) was quick to assert he "would advise strongly against going pay-up-front. ... We had our first game launch as pay-up-front and experienced over 97% piracy and about 2,500 sales, even with a huge marketing push. So we went freemium for our second game and are now pushing 2 million users." Other commenters felt Android was the problem, and instead the game should be moved to iOS as there is "much more cash to be made there." That commenter offered no data to back up the assertion (and was not challenged), despite evidence that "the average game on iOS makes ... no money at all" (Galyonkin 2015a).

Some commenters did try to engage on the pricing question however. One person agreed with Tim's dislike for IAPs, and suggested, "For a full-priced game, ask for \$1, the minimum possible price. If you are feeling bold, ask for \$3 ... Really bold? \$5" And one commenter pushed for an entirely different strategy, particular for a new developer "If I had to start all over again now, I'd create the most awesome game that I can possibly

create, give it away for free on as many platforms/systems as I possibly can, and shout about it to make sure everybody notices me and starts following me on social media. Then the next game you can start asking money and hope those newly found fans stay around for your games." Even this small sample demonstrates the diversity of opinions found among this group and the way they made their cases. While some relied on personal experience and used data to make their case, others fell back on questionable evidence or assertions as well as simply personal opinions or conjecture.

In a similar thread a year later, ethanxxx posted that he was releasing his game INK via Steam and had trouble deciding on the price. His team felt the game should be priced between \$5 and \$10, but feared a lower price would lead people to "assume it's bad simply because it's [priced] too low."

Opinions again varied widely on what he should do, with some commenters strident in their assertions about the game's potential price point. The top rated comment, from Blazzguy, tried to have it both ways: "Put it at \$10. Have an 80% off sale. Boom." But there was no consensus on what price was best for INK, at least as a starting price, with a variety of contradictory advice following that. Cantgetno197 said simply "that looks like a \$5 game to me"8 while ali nagori offered a strategic justification for a lower price based on how Valve groups games: "[price it at] 4.99\$ your game will have more chance to be visible in the under 5\$ sections." Jimeowan wrote in contrast "\$7 sounds like an attractive price and still values the game fairly", but offered no real reason why this would indeed be 'fair.' Going higher still, Keyshadow believed the price should be \$10, but that would still depend "on how much gameplay there is. If it only lasts for 30 min[ute]s/[one] hour then you may want to reconsider." Here, the question of value is equated with the size/length of the game – more gameplay and content results in a better justified higher price. Komollo felt that starting at \$15 for the game would be even better as "one study found that people enjoy games that they have paid more money for. ... Don't underprice your game. It will make people undervalue it. ... you can lower the price later through sales, and people will get happier, but you cannot increase the price without making people upset." Such a statement offers a different justification for value beyond length – here the price itself will set the value of the game, rather than having the game's value determine its price.

Back to the size or scope of the game, GagaPete felt that if the game had more than 3 hours of gameplay, pricing starting "around 12 – 15 USD", while JohnnyElBravo simply wrote "ASK STEAM to price your game," implying that they were the professionals and would perhaps know best what this type of game would sell for. Eschewing the dilemma of choosing a particular price, Frenchie14 pointed out that "\$5 vs \$10 doesn't make any difference to me. The hard part is getting people to decide they want to buy the game in the first place. People who want the game to be cheaper will wait for it to be on sale, not for it to hit a certain price."

These kinds of discussions appear in multiple threads on r/gamedev during the time period examined, as developers tried to determine the relationship between a game's *price* and a game's *value*, or even if such a relationship still existed. Many voice their frustration at a saturated market, where buyers have been "conditioned" to expect both low prices and to wait for sales where those prices will be reduced even further. One baseline that does emerge is that a game's starting price is only ever that – what its initial listing will be, much like the sticker price of a new car in a dealer's showroom. A game's

price can and will decline over time, as the game ages and enters the "long tail" of declining sales and interest, and as it is eclipsed by 'newer models.'

Most such discussions and post-mortems revolve around games with prices that range from free through to \$5 or \$10 at most. Yet one discussion of a game bucked that trend, serving as the example that proves the rule. In July 2015 a post appeared from the developer of the "ASCII roguelike game" Cogmind, which discussed the game's development process as well as the developer's design decisions, marketing efforts, and their controversial decision to price the alpha version of the game at \$30 USD. 16 What's interesting here is not simply the unusualness of such a price for an indie game, but the lengths the writer goes to in order to justify that decision. Kyzrati writes, for instance, that the "backlash was far less severe than I expected." He goes on to point out that the roguelike community, which has expectations for lots of high quality free games, still accepted this decision, in part due to the quality and new features of the title, but also because the company wanted to focus on a particular kind of buyer or player: "I want quality players who are familiar with where Cogmind is coming from." Kyzrati points further to the price as a way to sift out "those who buy discounted games on a whim and may or may not ever even play them." Here, one developer discounts much of the 'conventional wisdom' about selling/pricing a game – particularly that potential buyers primarily look at a game's price. Instead he argues he does not want those kind of potential buyers – instead, as with the prior commenter who believed a high price would produce investment in purchasers, Kyzrati wants 'quality players' who want to play the game, not simply add it to their game library.

In closing, Kyzrati makes the case to the larger community that game pricing should be directed toward the particular audience or player base a game is trying to reach, such that "games must be priced for their market, not some general 'okay indie games average about \$10 right now so this should be \$10 too." 18

While many such discussions exist and could be further analyzed, they span a diverse array of platforms, each with its own issues and contest. One that receives perhaps a disproportionate share of attention, however, is Steam, which will be focused on next.

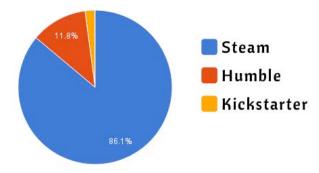
LETTING OFF STEAM

Valve's Steam platform, which launched in 2002 and now claims more then 100 million active users, is a perpetual point of discussion for indie developers in many different and complex ways (Makuch 2014). Initially created as storefront for Valve's own (and other) PC games and a way to easily update them, the platform has evolved into the dominant site for digital game purchases on the Web. Over that same time period, Steam has opened to major and minor publishers and developers, including indies. In exchange for the ability to publish via Steam, Tanya Short reports that Valve takes 30% off the top of all game profits. Valve plays a continuing role in managing developer activities while their game is listed: "they have to approve any requests for sales/discounts, the first version of your store page, and/or any new products (like DLC, soundtrack, deluxe versions, etc). Oh yeah, also they have to approve your requests of Steam keys of your game, which are yours to do with as you wish. ... You usually get a few (like 5) opportunities to put your game onto the front page (though not as the top giant image), and it's up to you when you do that."

Even a few years ago, it was easy to see why indies would be excited about getting their game hosted on Steam: in 2013 only 561 titles were released via Steam, with

expectations that a new game might remain on the store's front page for days, rather than hours, at a time (Lahti 2015). Industry insiders often refer back to that potentially fabled past as the "holy 2013 way (put your game on Steam, receive money, brag on Twitter)" (Galyonkin 2015b). Things have changed remarkably since then: 1900 games were released on Steam in 2014, and more than 3000 titles appeared in 2015, suggesting an average of about 8 games released every day now (Galyonkin 2016). This means Steam has become a key site for risk management by indies who want to be successful and a critical node for value-crafting when it comes to not just pricing, but also determining release dates, sales discounts, and other factors. As one developer pointed out when he compared sales data for two of his studio's games, released in 2012 and then 2016, the shift to Steam as the predominant site for sales was undeniable "it seems that your game doesn't exist unless it's on Steam" (Grochowiak 2016). In his estimation "this means we're no longer independent developers, we're Steam developers." Other developers make similar points, usually backed with pie graphs demonstrating the overwhelming dominance of Steam as a point of sale. 21 For example, Lost Decade Games' developer Matt Hackett wrote that his studio's game A Wizard's Lizard sold nearly 15,000 units, with 86% of them coming from Steam, neatly illustrated by him with the following graphic (Hackett 2014).

A Wizard's Lizard sales



Total: 14,719 (Jan 22-Oct 8 2014)

Figure 1: "A Wizard's Lizard by the numbers."

Visuals often convey more starkly what words perhaps only suggest – Steam cannot be ignored by developers, at least if they want to sell more than a handful of copies of their game. And so they must continually refine their techniques for using Steam and its evershifting processes. Perhaps summing up this dependence for many indies, game developer Doucet subtitled his "I Wish Upon a Steam" blog post with "I write about Steam a lot, because they hold my fate in their hands like a tiny bird" (Doucet 2014).

Getting accepted & the Greenlight system

The process for getting a game accepted onto Steam has always been something of a black box for developers, moving from a submission process with acceptance based on unknown factors to the more recent "Greenlight" system for new developers (proven developers can skip this step), which requires potential players (the voting public) to "up" or "down" vote releases for acceptance onto Steam.



Figure 2: Greenlight example taken from Steam, March 28, 2016.

Yet there are no hard and fast rules for how many up votes a game must receive or how long that process might take. In late 2015 koobazaur reported "we've been hearing that Greenlight is on the decline for quite some time and I think there is no double about that. ... I just started a Greenlight for my second game and ... I was actually taken aback by how rapid the decline actually is," going on to show voting counts to back his assertion.²²

	October 21, 2015	July 20th 2015	March 9, 2015
VISITORS	AVG. TOP 50 (*)	AVG. TOP 50 (?)	AVG. TOP 50 (7)
	7,805	15,100	21,548
FAVORITES			
	141	319	
		338	307
FOLLOWERS			
Current	147	313	285
VOTES			
	5,068	10,185	14,678
	1,709 (34% of total)	4,367 (43% of total)	4,684 (32% of total)
	3,359 (66% of total)	5,818 (57% of total)	9,994 (68% of total)
'Ask Me Later' Votes (?)		-	

Figure 3: "Relevant graphic."

Other developers challenged that assertion, however, with Pfisch claiming "the reason for these declines is because they are greenlighting games faster. As in they require less total yes votes before being greenlit and therefore the top 50 spend less total time being in the top 50."²³ However, Pfisch offered no data to back his argument. Other developers felt the process wasn't curated well enough by Valve, which allowed for "shady marketing" practices to taint the process. ²⁴ Xinasha summed up the general mood, writing, "Greenlight has to be one of the most mystery-shrouded stages in the game development process nowadays. There is very little concrete data as to what Valve is looking for in a game – I've seen games with solid yes/no ratios and tons of traffic stall for weeks and I've seen games with 1000 visits and a decent ratio go through in days."²⁵

Just as theory-crafting by players can be stymied by developers who refuse to confirm or deny player formulas for success, indie developers who want to gain access to Steam must go through the Greenlight process, and face a system that can seem transparent but is anything but. Yet even if they do manage to get their game approved, many more questions arise for them to negotiate. Yet the answers they seek cannot always be answered by analytics or other developers, either successes or failures.

Once Greenlit, developers face another immediate question - should they enter the "Early Access" program, which can give users access to alpha as well as beta versions of their game, either free or paid, or wait for the game to be finished and then release it as complete instead? Sergey Galyonkin (better known via his blog name "Steam Spy") has become an influential voice in the game industry as it relates to Steam, based on his detailed analytics of the platform and its game sales. Writing in relation to changing trends and the evolution of the service, he argues "every game still has only one launch event and if you're going to release it in Early Access that date will be it" (Galyonkin 2015a). Galyonkin bases his claims on a proliferation of data, including key points such as that "almost 2000 games get released every year" on Steam, and so – he argues - developers must carefully choose when they wish to draw most attention to their game – they likely won't get a second chance.

Whenever developers do choose to launch, the system can actively work for and against them. Developers who have been sharing information about their development processes and marketing plans become competitors, both in terms of their current launches as well as prior releases. One growing worry is the increasing backlog of games that Steam players have accumulated, perhaps depressing future sales. One commenter used his own personal experience as an example, yet did not comment on how representative or not his case might have been: "thanks to bundle buying between 2012 and 2014 my game library ballooned to over 500 games. This destroyed [my] ability to concentrate on one game, I rarely anticipate a game's launch, and my experience playing most games has this glaze of disinterest."²⁶ Another poster on the same subject explained that a game's failure might have nothing to do with its quality but instead with the saturation of particular genres: "the market is soaked with 2d platformers to the point where it's not even worth pointing out anymore... it's just common knowledge."²⁷ Such comments demonstrate that not all arguments are backed by evidence - some still rely on either personal experience or 'common wisdom,' but the more evidence a person can offer for their argument, the more likely it is to be believed as well as then repeated on as helpful advice.

Another tactic indies have developed to deal with such realities is careful study of the "Wishlist" system that Steam has been refining, and now includes as part of front page

listings when those games are on sale. Lars Doucet explained how he carefully mined Wishlist data for his own game to good effect and then reassured other devs that "the front page in the sale is still driven by hand-picked games, [but] there's now a nice customized space that any game can occupy just by being on someone's wishlist" (Doucet 2014).

Frontpage placement can indeed be key for selling games. *Steam Marines* got voted a "Community's Choice" pick during the 2013 holidays, and even with "a steep discount" on the game's price, "the impact was enormous" on sales, as the developer was quick to show via the following graph ("Steam Sale – Community's Choice – Worthless Bums – The Blog" 2017).

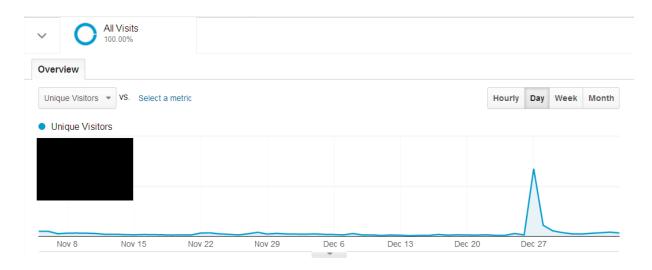


Figure 4: Sales for Steam Marines on Steam, November – December 2013.

Indies will use any such tactic – particularly sales events - to stand out in such a crowded marketplace. Even though prices are often deeply discounted, the increase in volume that sales generate can override other factors. As one developer explained to a poster on r/gamedev who asked how Steam and developers could possibly profit from "sales of such cheap games," the presence of such sales events has changed purchasing habits for many players, such that "there are a huge number of people who will buy a game when it's on sale, but not when it's *not* on sale. Because of this, when a game goes on sale, they [the developers] only make 10% of what they originally did per copy, but they get more than 10x their sale *volume*. ... all of your friends buy it on sale and talk about how great it is so you decide to buy it (even though its no longer on sale). It provides a huge boost to marketing/exposure." 28

In addition to Community's Choice sales, developers are quick to point to how other sales have benefitted their games as well as others they know about. One commenter in the same post noted a recent article "detailing how dropping the price of their game by 75% actually earned them as much money as they had earned to date in 8 hours." The game in question – the AAA title *Left 4 Dead* – was part of a half-price sale which "resulted in a 3000% increase in sales" for the title, "posting overall sales that beat the title's original launch performance" (Breckon 2009). That sale wasn't just good news for

large developers – Valve announced that during the sale, games that were 50% off had a 320% increase in sales, while games discounted 75% had a 1470% increase (Breckon).

Yet even studying data and reading others' reports does not guarantee success. Developers do fail to exceed (or even meet) their expectations, events which are also often turned into data for other developers to learn from, part of the system that Browne described as indie labor. Richmondavid reported on his game's Steam launch and how he tried to do everything right, including getting lucky (or strategic) in picking a launch day when "there were only 7 games released that day. The day on Steam was 'slow' with traffic so initial free marketing I got from Steam was spread out across almost 11 hours."³⁰ Yet even with such a (relative) advantage, and the game gathering "over 11000 views [they] resulted in only 21 sales. A week later, and the sales are at 78." Richmondavid is quick to blame the price of his game – Seeders - as the most probable reason for failure – explaining "I somehow believed that people would pay \$8.99 for 10+ hours of unique out-of-the-box puzzles. Boy was I wrong. If we could turn back time, I would have priced it at \$4.99 without blinking." While some commenters did agree with the price assessment, and others critiqued other elements of the game as reasons for its lack of quick success, others were not so quick to pronounce failure: "give it more time before making any dramatic decisions about the success or failure of this and before making any extreme changes to the way you do things next time."³¹

That commenter likely was correct – it was too soon to admit defeat. The developer (a one-person team - Bigosaur Games in Serbia) released a major update for the game in October 2015, which responded to Steam reviews that puzzles in the game were too difficult, by changing some elements to make them easier to solve, and also then allowing more access to the game's story. Figures on Steam Spy for *Seeders* as of March 28, 2016 show the number of owners of the game at 12,268 and a price of \$9.99 USD, suggesting that some commenters were correct while others were off target. Even the developer's own admission – that s/he should have lowered the price of the game – likely was not an issue, although we cannot know how many of those copies were sold during sales. The larger point, however, is that selling games has become a moving target, and even 'failures' are hard to call as such, when another sale or update may be right around the corner.

CONCLUSIONS

The videogame industry (or industries) is not what it was 10 or even 5 years ago. Barriers to creating and publishing games have fallen, and perhaps unsurprisingly we have seen an explosion of games coming from many parts of the world. The challenge is now not getting access to game development tools like console dev kits or finding a publisher, but instead garnering attention – obtaining press coverage, fighting for attention on platforms like Steam and iOS, and convincing players to pay for your game. Thinking of these activities as value-crafting helps us see the new forms of work that developers do beyond 'core' game development, and beyond the simple term 'marketing.' There is much more involved now – as there is in many media and tech fields – than just 'creating a great product' and assuming customers will find it. As Steam Spy writer Galyonkin points out, "Steam is no longer a discovery mechanism" but more like a large bookstore crammed with titles (Galyonkin 2015b). Yet Galyonkin also buys into some of the rhetoric that for indies, enough data, enough research and hard work will result in success. In the same piece where he exhorts indies not to rely on Steam as a guarantee of success (if any of them still do), he also writes that "the fact that your game is better than most games in 1984, 1994, 2004 or 2014 doesn't mean anything. Your game has to be better than

everything that is going to be released this year or, preferably, next year as well' (Ibid). But there are too many variables at play to simply believe that a 'great game' or even 'the greatest game' will automatically sell well. Instead, indies now value- craft, researching prices and genre sales figures, to determine how to work Steam's analytics and systems (Greenlight, Early Access, Wishlists, Curators, Sales Events) as well as they can. It also means putting the same scrutiny into launching Kickstarter campaigns, soliciting and working with YouTube's Let's Play community and Twitch's live streamers, fostering a fan community, finding niche press that will give you attention, as well as correctly pricing your game and figuring out exactly when and how to release it. Not to mention, making the actual game.

In addition to this work, and as a way perhaps to 'pay it forward,' indies put a lot of energy into creating documents and data and knowledge not only for themselves but for other indies. This is another key element of value-crafting. Why do they do this? Why let another developer benefit from your success (or failure) when they may also be a competitor? Browne argues this is part of the indie 'ethos' - part of what comprises indie labor (Browne 2015). Being indie is signaled not only by the size of your studio or the lack of corporate ownership, but also by a willingness to counter the AAA practices of secrecy and NDAs. Indies are (allegedly) as much about openness as they are about a certain type of game development. This means sharing data and experiences. It also becomes a way to rhetorically construct the process of indie game development - to reassure the writer as well as other developers that there is a system involved that can be cracked through proper and detailed analysis. Just like theory-crafting players believe that with enough experimentation they will discover optimal strategies for in-game success, indies also are coming to believe that charting their actions, graphing their successes and failures, illustrating trends and posting formulas and spreadsheets will alleviate the risk and point towards more success. Of course theory crafters in games are operating in a space where there is at least the illusion of a meritocracy, and one player's success is not necessarily the downfall of another. But on Steam and other platforms, there are winners and there are losers, and even when indies follow all the guidelines for success, they still might not win. But the long tail never actually ends - it continues to trail on, and so the rhetoric of analytics and technicity continues on as well, gaining more adherents among indie game developers.

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ENDNOTES

- https://www.reddit.com/r/gamedev/comments/1zqakx/how to find out what our game is worth
- ² https://www.reddit.com/r/gamedev/comments/1zqakx/how to find out what our game is worth/cfw4tf7
- ³ https://www.reddit.com/r/gamedev/comments/1zqakx/how to find out what our game is worth/cfw5119
- 4 https://www.reddit.com/r/gamedev/comments/1zqakx/how_to_find_out_what_our_game_is_worth/cfw211t
- ⁵ https://www.reddit.com/r/gamedev/comments/1zqakx/how_to_find_out_what_our_game_is_worth/cfwlw7i
- ⁶ https://www.reddit.com/r/gamedev/comments/3d0bp1/ink pricing our game on steam/
- https://www.reddit.com/r/gamedev/comments/3d0bp1/ink pricing our game on steam/ct0n084
- 8 https://www.reddit.com/r/gamedev/comments/3d0bp1/ink_pricing_our_game_on_steam/ct0mwc1
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- 16 https://www.reddit.com/r/gamedev/comments/3cdmu9/releasing_a_commercial_ascii_roguelike_a/
- ¹⁷ Ibid.

18 Ibid.

 $https://www.reddit.com/r/gamedev/comments/3pp29b/rapid_decline_of_greenlight_interesting_thing_i/cw8i \ xb5$

https://www.reddit.com/r/gamedev/comments/3pp29b/rapid_decline_of_greenlight_interesting_thing_i/cw8e e4m

 $https://www.reddit.com/r/gamedev/comments/3pp29b/rapid_decline_of_greenlight_interesting_thing_i/cw8h\\ o3f_{26}$

 $https://www.reddit.com/r/gamedev/comments/3nyuls/master_spy_postmortem_we_didnt_make_a_million/cvtkvnl$

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30 https://www.reddit.com/r/gamedev/comments/3irs1k/steam_launch_postmortem/

 $^{^{19} \} https://www.reddit.com/r/gamedev/comments/3p983p/has_anyone_here_published_on_steam/cw4aba620\ Ihid.$

What makes this predominance somewhat dismaying is Steam Spy's assertions that the audience using Steam is predominantly male (95%) and tend to come from the US and Europe (Galyonkin 2016). If developers are tailoring games and marketing efforts to appeal to Steam users, large parts of the market are being ignored.

²² https://www.reddit.com/r/gamedev/comments/3pp29b/rapid_decline_of_greenlight_interesting_thing_i/23

³¹ https://www.reddit.com/r/gamedev/comments/3irs1k/steam_launch_postmortem/cukkcxj