Agent Heterogeneity in Two-Sided Platforms: Superstar Impact on Crowdfunding

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Abstract

How do differences among users on one side of a two-sided platform affect the platform's growth and liquidity? I focus on the arrival of high-performing sellers, or stars, and subsequent seller entry and buyer transactions. In the context of crowdfunding, I find that the arrival of a star on the dominant platform results in a decline in seller entry and transactions, relative to the competing platform. Within a platform, I find evidence of an increase in entry and transactions for sellers that are similar to the star on the dominant platform. The impact of stars is dependent upon how stars are defined and the characteristics of the star. The results in this paper suggest in addition to pricing and platform structure, competing platforms may selectively focus on attracting users with high performance potential to create competitive advantage.

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1 Introduction

Two-sided platforms that facilitate transactions among distinct sets of users are an increasingly becoming pervasive. The "app economy," "sharing economy," "cloud computing," and many other emergent trends in the popular press all effectively involve platform models that allow 'buyers' to directly transact with 'sellers' rather than firms to sell through to buyers.

The success of platform businesses requires them to adequately address the "chicken and egg" problem (Caillaud and Jullien, 2003) and achieve a "critical mass" (Evans and Schmalensee, 2010) on one or both sides of the platform during a growth phase, typically while in competition with other incumbent or nascent platforms. Theoretical literature has considered growth in two-sided platforms (Evans and Schmalensee, 2010; Hagiu, 2006) as well as platform equilibrium. Further understanding platforms during their growth phase requires a consideration of the interplay between the two sides, in the face of platform competition. During the emergent stages of a two-sided market, users join on both sides of the platform and transact with one another. Agent characteristics (such as a seller's quality, performance, or brand recognition) on each side may affect the behavior of users on both sides and thus impact the liquidity and growth of the platform. In this case, not only does the number of participants affect the growth potential of the platform, but so too does the types of users present.

To better understand the growth phase of platforms and the importance of different types of participating users during the growth phase, I investigate how heteroge-

neous users[1] on one side of a platform affect the platform's growth and liquidity. Specifically, I consider performance heterogeneity by looking at the impact of high performance, or star, sellers on the transaction behavior of buyers.

Stars play a considerable role in economic environments (Rosen, 1981; MacDonald, 1988; Brown, 2011) and knowledge productivity (Azoulay et al., 2010; Oettl, 2012; Agrawal et al., 2014). The former represent competitive environments (where stars inhibit the performance of other agents) and the latter is modeled as a cooperative environment (where stars spill over to the performance of other agents). In other words, in competition other agents are better off without the star, but in cooperative settings, agents are better off working with the star. How do stars impact platforms, where platforms compete and indirect network effects operate? Understanding star impact on platforms is of particular importance to managers of platforms devising strategy to grow their platform.

The competitive impact of stars is also of interest in other settings. Platforms actively seek to host star goods to drive competitive differentiation from others. Video game console manufacturers typically highlight big name developers or game titles that will be released concurrently with the console to drive initial consumer adoption. Sometimes the platform itself will seed one side of the market with well-known brands to drive adoption on the other side. Media companies such as Netflix have

[1]Whereas the theoretical literature typically considers number of users on each side of the platform, one can imagine that one user is responsible for multiple offerings on the platform (e.g. one software developer sells multiple applications in an Application Store). In this paper, I consider an user to be a single user-offering pair, and so I use the terms user and offering interchangeably. Also, for the sake of expositional clarity, I will call the set of users on one side of the platform *sellers* (or *creators* within the context of the empirical setting) and the set of users on the other side of the platform *buyers*. (or *backers*)

begun to produce video content for their subscribers, starring famous actors (e.g. Kevin Spacey in *House of Cards*). Mobile operating system platform, iOS, highlights featured developers that have created historically high performing apps for the platform. My results will be informative to these other cases of platforms, platform competition, and star offerings.

I evaluate the impact of stars on platforms, by considering two levels of impact. First, I consider how stars impact the growth of competing platforms with one dominant player. Second, I consider the impact of stars within the platform, by looking at its impact on similar users. I utilize the Kickstarter and Indiegogo crowdfunding platforms as the setting for this paper. Crowdfunding on online platforms has become a viable means to raise capital for firms, projects, and other causes. Kickstarter, the largest crowdfunding platform, recently announced it has raised a total of $1 billion on its platform since inception in 2009. An ecosystem of crowdfunding platforms has emerged to raise funding for anything from scientific research projects to charitable causes and medical procedures.

I find evidence of a negative competitive effect for the dominant platform hosting the star, in terms of both entry and transactions. I also find evidence that the star disproportionately benefits similar sellers within the platform hosting the star. However, the aggregate results mask importance sources of variation in the data. Specifically, star impact differs by star definition and star characteristics. Stars at the extreme tail of the performance distribution and stars in certain product categories provide entry and transaction 'spillovers' outside of the category of the star.

2 Literature and Theory

2.1 Literature review

2.1.1 Two-sided markets theory

Models from theoretical research on two-sided markets and platforms make different assumptions about agent heterogeneity. Some assume users are homogeneous on both sides of the market (Caillaud and Jullien, 2003; Parker and Van Alstyne, 2005; Evans and Schmalensee, 2010). Others assume agent heterogeneity in either preferences over "membership" (i.e. utility from participating in the market) (Armstrong, 2006), over "interaction value" (i.e. number of users on the other side) (Rochet and Tirole, 2003; Ambrus and Argenziano, 2009), or over both (Weyl, 2010). Given these agent preferences, participation, and the network effects of interest, many models are solved for the optimal pricing and structure on both sides of the market.

Explicit consideration for the attractiveness of certain users is given by Rochet and Tirole (2003). They argue that the existence of "marquee" buyers (sellers) increases the desirability of the platform to sellers (buyers). Pricing for the same side as the marquee agent decreases, and increases for the other side. Ambrus and Argenziano (2009) note that users may be heterogeneous on dimensions that extend beyond preference over the size of the other side of the market. Specifically they may be heterogeneous "with respect to the network externality they generate—their 'attractiveness' to consumers on the other side." Also, Hagiu (2009) makes the case for pricing to increase for producers when consumers demand product variety.

Other studies focus on platforms dynamics, including the role of network effects in achieving growth (Evans and Schmalensee, 2010) and entry feasibility in the face of an established incumbent (Zhu and Iansiti, 2012). The models suggest that when platform conditions involve weak indirect network effects and lower expectations about future offerings on the other side of the platform, an entrant can enter and compete (Zhu and Iansiti, 2012).

2.1.2 Empirical research

The most closely related empirical studies consider the impact of stars on the adoption of platforms by users on the other side of the market (Binken and Stremersch, 2009; Lee, 2013). In the context of video game consoles and star game titles, star arrival causes an increase in adoption on the other side.[2] The papers consider neither follow on entry on the same side as the star (i.e. other video games), nor consumer transaction behavior following the star arrival.

Heterogeneity among users has been empirically studied in the context of network effects and platform competition. When network effects are present, the diffusion of adoption depends on the characteristics of current users. Having "boundary spanners" adopt accelerates the adoption decision of potential users (Tucker, 2008). Platform adoption is affected by distribution channel (Bresnahan and Yin, 2005) and by direct network effects i.e. number of users on the same side (Augereau et al., 2006).

[2]The magnitude of the increase differs between the two papers. Binken and Stremersch (2009) estimates a 14% increase in console adoption from a star, while Lee (2013) estimates that counterfactual loss in platform sales from removing a hit game was a a maximum of 5.5%.

Understanding how differences in users drive the equilibria and tipping point of platform competition has been the focus of many empirical studies. For example, obtaining exclusive agreements with select users can help entrant platforms compete with incumbents (Lee, 2013). User characteristics (Hendel et al., 2009) and platform differentiation (Cantillon and Yin, 2011) can also explain agent adoption choices.

Still other studies focus on other aspects of platforms, including entry in platform markets (Zhu and Iansiti, 2012; Seamans and Zhu, 2014), pricing implications to changes in competition on the other side of the platform (Jin and Rysman, 2013), and measuring indirect network effects (Rysman, 2004) . Many other empirical studies on platforms investigate pricing implications of each side of the market.[3]

The contribution of this paper is within this growing empirical set of papers on agent heterogeneity given network effects and two-sided markets. Neither the theory, nor the empirical literature in two-sided markets has explicitly focused on the impact of highly desirable, or star, sellers on follow on seller entry and buyer transactions.

2.2 Theoretical foundation

2.2.1 Across platforms

How does the arrival of a star seller on the dominant platform impact platform competition? The star brings attention and resources from participants joining and

[3]I refer the reader to Seamans and Zhu (2014) for an excellent review of current empirical literature in two-sided markets.

transacting on the platform and media. If the star is specifically associated with the dominant platform, follow on entry (and thus transactions resulting from indirect network effects) will accrue disproportionately to that platform. If this was the case, subsequent to the arrival of a star agent, entry on the same side of the platform and transactions will increase for the dominant platform, relative to the competing platform.

However, if the star draws attention to the growing platform industry, then a uniform impact across all platforms of the star would disproportionately benefit the smaller, competing platform, relative to the larger dominant platform. In this case, subsequent to the arrival of a star agent, entry on the same side of the platform and transactions will decrease for the dominant platform, relative to the competing platform.

2.2.2 Within platform

In this section, I outline how indirect network effects and agent types interact in the context of a star's arrival to produce countervailing effects on each side of the platform.[4] Indirect network effects are a prominent characteristic of two-sided platforms. The utility of users on one side of a market are positive increasing in the number of users on the other side. The arrival of a star will increase the membership (Binken and Stremersch, 2009) and desirability (Rochet and Tirole, 2003) on the other side of the platform with the star. What types of users participate and transact due to the

[4]In Section 5.1, attempt to distinguish circumstances in which a given effect is more prominent.

star? If the the star attracts participation and transactions from the other side of the platform that have a particular taste for projects like the star, then the indirect network effects will particularly effect users similar to the star, and users that have a taste for such users. In this case, subsequent to the arrival of a star agent, entry on the same side of the platform and transactions will increase for similar users.

Alternatively, if the star attracts participation and transactions that have do not have a specific taste for those projects, then the star will create spillovers throughout the platform. Then, subsequent to the arrival of a star agent, entry on the same side of the platform and transactions will decrease for similar users.

3 Setting and Data

I use crowdfunding platforms as the setting for this paper. Crowdfunding platforms are canonical two-sided markets: one side are capital seekers, or creators, and on the other side are capital contributors, or backers. In its current iteration, crowdfunding is the act of raising capital through an online platform. The use or recipient of funds is diverse and include creative projects, firms, specific products, political and social causes, research, and personal circumstances. Backers can receive a number of different commitments from project creators in exchange for capital, including goodwill, equity, debt, promises of future delivery of goods and services, or recognition.

Typically, when a creator initiates a project on a platform, she will typically provide certain content and set certain parameters associated with the project. The cre-

ator typically describes the the project using text and multimedia, specifies current progress, and provide biographies and related experience of project creators. She will also decide parameters of the project, including the funding goal desired, expiration of the campaign, and contribution tiers with different awards associated with different levels of pledges. Creators can provide updates on the fundraising campaign or the project and backers can typically publicly comment on the project.

The platform fee structure typically involves a fee charged by the platform on the total amount of successful capital raised. Effectively, the creator is charged for a successful financing, similar to many traditional capital raising intermediaries. Given the typical absence of explicit membership fees, creators and especially backers likely experience a membership benefit for participating in the community aspect of crowdfunding.

A feature that may not be be typical of other two-sided markets is the limited availability, and thus turnover, of projects by creators. Typically, at the time of project creation, a duration is specified by the creator. At the expiration, the pledges will be transferred if the terms of the campaign were met. The temporary nature of crowdfunding projects implies that the supply of projects is time variant.[5]

An emerging stream of research around crowdfunding has investigated several as-

[5]The implications of turnover in the participant seller projects may be generalizable outside of crowdfunding. Experience goods, such as music, typically undergo a decay in consumption over time. Additionally, perishable goods, are also available for a limited time (Sweeting, 2012). This raises the question of whether backers consider their pledges to an experience good (i.e. the experience of contributing to a campaign on a crowdfunding platform) or a limited availability pre-purchase. This distinction may go towards understanding backer motivations for contributing and the appropriate response of creators to backers after campaigns are complete and funding is transferred.

pects of the phenomenon, including determinants of success (Lambert and Schwienbacher, 2010; Mollick, 2014), incentives (Agrawal et al., 2013), choice of financing (Belleflamme et al., 2010), geography (Agrawal et al., 2011), legal aspects (Kappel, 2008), choices relative to experts (Mollick and Nanda, 2014), and backer behavior (Kuppuswamy and Bayus, 2014).[6]

3.1 Kickstarter and Indiegogo

I use the two largest crowdfunding platforms, Kickstarter and Indiegogo, as the setting for this study. In the context of crowdfunding, I investigate how star projects by creators impact backer behavior in ensuing projects. The impact of star projects is of great importance to the platforms themselves, as Kickstarter has written about what it calls "blockbuster" projects on multiple occasions (Kickstarter, 2012, 2013b,a).

Though the overall services of Kickstarter and Indiegogo are substantively similar, I highlight a few important differences:

Fundraising mechanisms. All projects on Kickstarter require the project to meet or exceed its goal in order to receive the funds. If the goal is not achieved, backers are not committed to delivering their pledges. On Indiegogo, project creators can choose the previously described 'fixed' fundraising mechanism, or they can opt for 'flexible' fundraising, where the creator has the option to accept funds even if the goal is not met. The tradeoff for the project creator is that a project that does not reach its

[6]For an excellent detailed review of crowdfunding research, see Kuppuswamy and Bayus (2014).

goal under the 'flexible' fundraising mechanism is due a higher fee for those funds. Though both options are available, only 5,582 projects in my sample had fixed goals on Indiegogo, which represents 5.4% of all Indiegogo projects in the sample.

Fee structure. Kickstarter charges a 5% fee of successful projects (project creators must also pay 3-5% in transaction fees to payment processors). Indiegogo charges a 4% fee if the goal is met, regardless of funding mechanism. For flexible funding, the fee is 9% if the goal is not met.

Curation and categories. While many classes of projects are consistent across the two platforms, Kickstarter has historically been more restrictive in the types of projects that are allowed to post on its platform. This difference is represented by the available project categories on Indiegogo that are not on Kickstarter, primarily those related to causes (which includes community, political, religious, and non-profit projects).[7]

Statistics for the two platforms during the sample period (described in Section 3.4) are shown in Table 1.

[7]Kickstarter has recently shifted its rules (Kickstarter, 2014a), making the platform more open to the types of projects that are allowed and dramatically the category structure (Kickstarter, 2014c,b).

3.2 Star projects in crowdfunding

Stars operate at the tails of their respective distributions—scientists produce high quality output, athletes win and post big 'numbers,' and musicians sell more albums. Rosen (1981) defines superstars as "relatively small numbers of people [earning] enormous amounts of money and [dominating] the activities in which they engage" To operationalize a performance-based definition of stars, I employ a 'high water mark' approach to identifying stars. Specifically, among projects that received funding, I identify those that raised more in pledges than any prior project within the same category, and thus changed the tail of the distribution. To exclude early projects that raised low amounts of money but fulfill the above criteria (as is the case with early projects), I drop all projects where the amount pledged was less than the median pledged amount of high-water mark projects, which was $30,743.

Based on this definition, I arrive at a set of 72 'category star'[8] projects that appeared on Kickstarter[9] , the dominant platform (as summarized in Table A1). Star projects received a median of over $149,000 in pledges from a median 2,095 backers. The 72 stars account for 5.2% of all successful capital raised.

I employ this 'high water mark' categorization of category stars for several reasons. The definition provides a clear set of requirements that account for the changing definition of success and stardom in crowdfunding over time. Moreover, this definition of a star is based solely on project characteristics and performance on the

[8]In Section 5.3, I describe 'crowdfunding-wide' superstars, which are projects that raised more in pledges than any previous product, regardless of category.

[9]Three projects on Indieogogo are characterized as stars and are discussed separately in Section 5.2.

crowdfunding platform.

Many papers investigating star impact also look at the tails of the appropriate performance distribution in question (Oettl, 2012). Looking at high water mark performers is consistent with looking at the tails of the distribution, but it assumes a more austere definition of what constitutes the tail.[10] The division of time by year and looking at some percentile of the distribution are both assumptions. Those assumptions may result in stars that raise substantially less than prior stars, whereas that possibility is eliminated by my definition.

Finally, I do not focus on projects that achieved future commercial quality or success. Such projects may have an impact on crowdfunding, but I focus on crowdfunding performance to more clearly attribute subsequent performance to the arrival of the stars, given the substantial lag between the completion of a crowdfunding project, the launch of the commercial product (in the appropriate cases), and the realization of commercial success.

3.3 Measures

To capture the project performance and characteristics on Kickstarter and Indiegogo, I measure a number of aspects of each project including its timing, communication with backers, performance, and other characteristics.

[10] As one example, looking at the top 0.1% of pledged projects by category and year that also raised more than $30,000 yielded in 249 alternate star projects. Of the 249 projects, 59 are also stars as I define it.

3.3.1 Dependent variables

Entry To measure the impact on the same side of the platform as the star, I look at the supply of crowdfunding projects prior to the arrival and after the conclusion of a star project. I create *entrants*, which is the number of weekly entrants by platform and category.

Transaction measures I look at transactions on the other side of the platform from the star by measuring transaction volume using two funding measures, amount of money pledged and number of backers submitting pledges. Pledged dollars and number of backers are totaled weekly by platform and category to arrive at the *pledged* and *backers* measures, respectively. Pledged money for non-dollar denominated projects were converted to U.S. dollars using the exchange rate between the local currency and dollars as of the final day of the project campaign.

One substantive assumption made in the creation of these measures is that all funding occurs on the concluding day of a campaign. This assumption was required due to data limitations.

3.3.2 Focal independent variables

Timing relative to star For each of the 72 stars, a sample window before and after the the start date of the star is compiled and stacked. The variable *post* captures whether the focal week occurs after the conclusion of the star project campaign. The variable equals one when the focal week is after the star end date and zero

for weeks prior to the star start date. The period the star project was live on the platform is excluded from the sample period, such that the period after the star project is concluded is compared to the period prior to its arrival on the dominant platform.

Star platform and category I develop two measures, *star platform* and *star category* to capture two different dimensions of the star on the platforms. Platform competition is captured by *star platform* which equals one if the platform is the same as the one that hosted the star, and zero otherwise (i.e. the competing platform). Similarly, within platform are captured by *star category*, which equals one if the category is the same as the star category, and zero otherwise.

3.4 Data and sample

My data consist of projects initiated on the Kickstarter and Indiegogo platforms from inception through January 2014. I include only completed projects that were initiated between April 2009 and January 2014. Further, I include only projects in categories that are shared across both platforms.

Additional projects were dropped to eliminate possible test or fake projects. First, projects entitled "Untitled Draft Project" were dropped. Also, projects with duplicative names, locations, platforms, and funding types (i.e. fixed or flexible) were considered tests and all but the most recently started project were dropped. Projects where the goal was less than $100 (consistent with Mollick (2014)) or greater than

$10 million were also dropped from the sample.

The resulting number of projects in the sample for Kickstarter and Indiegogo is 103,470 and 116,228, respectively. Sample statistics for project related measures are presented in Table 1. Several facts emerge from the summary statistics. On Indiegogo, where project creators can choose a fixed or flexible capital raise, only 5% of projects were initiated under the fixed funding regime. Of the projects that chose a fixed funding regime on Indiegogo, only 19% successfully raised money, as compared to 48% on Kickstarter. The median goal was $5,000 on both platforms, but the median project duration of 45 days on Indiegogo was 15 days longer than Kickstarter. The most successful project on Kickstarter (the Pebble smartwatch) raised $10.3 million, or more than five times the most successful project on Indiegogo (Canary home security device), which raised $2.0 million. The Kickstarter community appears to be more engaged with more mean updates made by project creators and more mean comments posted by site members.

Given the project data, I construct the sample at the star period-project-category level. That sample is then stacked for each of the 72 stars and centered around the campaign period of each respective star. Summary statistics of the sample are presented in Table 3.

4 Empirical Strategy

To study how stars arriving on the dominant platform impact entry and transactions responses to stars on, I estimate the following general model[11]:

$$E(Y_{it}|X_{it}) = f[\varepsilon_{it}; \beta_1(\texttt{star platform}_i \times \texttt{star category}_i \times \texttt{post}_{it}) + \beta_2(\texttt{post}_{it} \times \texttt{star platform}_i) + \beta_3(\texttt{post}_{it} * \texttt{star category}_i) + \beta_4 \texttt{post}_{it} + \beta_6 X_{it} + \theta_i + \gamma_t] \quad (1)$$

where i indexes each star period-platform-category and t indexes time in weeks. The dependent variable, Y_{it} represents *entrants* or one of the transactions measures, *pledged* and *backers*. The variables *star category* and *star platform* equal one on weeks when the category and platform, respectively, are the same as the star's. To variable *post* equals one for weeks after the focal star concludes its campaign, and equals zero for weeks prior to its start. The term θ_i represents fixed effects for each star period-platform-category. Included in X_t are year fixed effects and calendar month fixed effects. X_{it} are included in the *pledged* and *backers* equations and consist of time-varying aggregate characteristics of projects that ended during the focal week, including *dollar goal* and *mean duration*.[12] Each of the individual and interaction

[11] The empirical model has the design of a triple difference model. However, the model contains an important distinction from the 'standard' difference-in-difference approach, in that the platforms operate in a competitive environment and the arrival of a star on a platform is likely to have an impact on the other. As a result, what is estimated is the differential impact of the arrival of a star on the platform that hosts the star relative to the competing platform, rather than a 'treatment' effect.

[12] Also included in this term is *zero exits*, a dummy variable set to 1 when the number of exits during the week equals 0. This term is included to account for the weeks during which there were no exits and mean duration is set to zero, rather than undefined.

terms between *star platform* and *star category* are fully absorbed by the fixed effects, θ_i, and are thus excluded from the above model.

The coefficients of interest are β_1 and β_2. The term β_2 represents the differential impact on the platform that hosts the star as compared to the competing platform, prior to the launch and after the conclusion of the star.[13] Thus, β_2 reflects the platform competitive impact of the arrival of a star. The term β_1 represents the differential impact on the category of the star within the platform that hosts the star prior to the launch and after the conclusion of the star, relative to the competing platform. In other words, β_1 indicates whether the platform competitive impact is mitigated or strengthened in the same category as the star project, and thus indicates the within-platform impact of the star.

5 Empirical Findings

I estimate Equation 1 using a fixed Poisson model with quasi-maximum likelihood standard errors. Each of the three dependent variables is nonnegative and highly skewed, motivating the choice for Poisson estimation with QML standard errors (Azoulay et al., 2010). Mean and median statistics for each dependent variable in Table 3 illustrate the skew in the data. Further evidence is provided by the skewness measure for each variable, which for *entrants*, *pledged*, and *backers* is 2.44, 9.46, and 7.87, respectively. There was no entry in 5.4% of weeks and no exits (hence no backer

[13]Though β_3 represents the category analog to β_2 with respect to the model, categories do not exist outside of the platforms, so the category effect of interest occurs within the platform and would thus be reflected by the coefficient of the triple interaction term, or β_1.

or pledge information) in 9.1% of weeks.

5.1 Results

Results for 72 stars on Kickstarter are reported in Table 4.

5.1.1 Platform competition

Following a star, entry on the dominant platform declines by 19.1% ($\exp(\beta) - 1 = \exp(-0.212) - 1 = -0.191, p < 0.001$), relative to the competing platform. Given a mean of 33.4 weekly entrants during the pre-period, the result implies a net decrease of 6.4 ($33.4 \times -.191 = -6.4$) projects per week on the star platform, relative to the competing platform, after the arrival of a star.

Star impact on transactions had a similar net effect on the dominant platform. Both dollars pledged and number of backers decline by 17.5% ($\beta = -0.192, p < 0.001$), relative to the competing platform. Mean dollars pledged in the pre-period were \$140,901 and mean number of backers were 1,936. The star results in a net decrease of \$24,658 in pledges and 339 backers to the dominant platform, relative to the competing platform.

5.1.2 Within platform

The negative competitive effect on entrants and transactions observed across platforms is mitigated in the same product category as the star within the dominant

platform. Project entry in the same category as the star increased 6.5% (p ¡ 0.098), relative to other categories, on the dominant platform after the star. After a star on the dominant platform, projects similar to the star received 22.0% ($p < 0.011$) more funding and 21.8% ($p < 0.037$) more backers than those in different categories, relative to the competing platform.

Looking at different samples of stars allows for a more precise understanding of the circumstances on which stars are differentially and particularly impactful.

5.2 Stars by platform

To corroborate whether stars disproportionately increase entry and transactions on the competing platform relative to the dominant platform, the same analysis was conducted for three category stars that were identified on the competing platform, Indiegogo. Results are reported in Table 5. Evidence from these results tentatively corroborates the benefit to the competing platform. Following a star on the competing platform, entry increases 8.8% ($p < 0.078$), relative to the dominant platform. Total pledged capital also increases 20.9% ($p < 0.068$), relative to the dominant platform. The positive increase in number of backers following a star on the competing platform is not statistically different from zero.

The direction of the coefficients across categories within the competing platform are consistent with that of the dominant platform. Entry and pledged capital increase especially within the same category as the star on the competing platform, though the results are not statistically significant. There is some evidence of a positive impact on

number of backers, with a 34.4% ($p < 0.004$) increase in number of backers within the same category as the star on the competing platform after the arrival of a star.

Taken together, the results from stars on the competing platform are consistent with the primary results from the stars on the dominant platform. The impact of a star disproportionately benefits the competing platform, particularly within the same category as the star.

5.3 Crowdfunding-wide superstars

To identify the 72 stars used in the primary specification, projects were identified as being the running maximum, *by category*. If the same procedure is undertaken for all projects across both platforms for all categories, a total of eight 'crowdfunding superstars' are identified.[14] The eight projects are identified in Table A1. Again, all eight campaigns were conducted on the dominant platform and were in the art (two projects), technology, film and video, design (three projects), and games categories.

Table 6 presents results of the impact of these crowdfunding-wide superstars. Similar to the category stars, entry on the dominant platform declines 22.4% ($p < 0.001$) relative to the competing platform. Unlike category stars, these crowdfunding superstars resulted in an increase in pledged capital of 8.5% ($p < 0.016$) for the dominant platform, relative to the competing platform.

[14]Projects that raised below $30,743 are again excluded from this set to ensure that the set of crowdfunding superstars is a subset of category stars.

The results for transactions in the same category suggest that there are spillover experienced within the platform from the star's category to other categories. Number of backers on the same category as the star decreases by 37.1% ($p < 0.097$), relative to other categories on Kickstarter (the coefficient on the triple interaction term *same platform* $\times$ *same category* $\times$ *post* in the dollars pledged regression is also negative but not statistically significant at a 10% level of confidence).

Comparing the results of crowdfunding superstars to to all star projects (in Table 4), high performers at the extreme tail of the distribution provide a liquidity benefit to the dominant platform and that benefit spills over across the platform to other categories.

5.4 Star impact by category

Disaggregating results by the category of the star reveals interesting heterogeneity in the star's impact. To most precisely articulate the argument, I focus on the film and video and theater categories (Table 7), and compare them to the design and technology categories (Table 8).

Stars in the design and film and video categories had a consistently positive effect on projects in the same category on the dominant platform.[15] The direction of these effects are consistent with the aggregated results in Table 4. The category-level

[15]The coefficients for the triple interaction terms for the pledged and backers regressions are 0.377 ($p < 0.001$) and 0.385 ($p < 0.001$) in the theater category and 0.402 ($p < 0.009$) and 0.512 ($p < 0.001$) in the film and video category.

impact of stars in the design and technology categories are reversed.[16]

5.5 Robustness tests

I explore the sensitivity of the results to design decisions and assumptions, including specification and definition of a transaction The results are reported in the appendix tables and are discussed below.

5.5.1 Definition of transaction

In the main results, a transaction was defined as a commitment of funds made by a backer, even in instances when funding was not ultimately transferred. The intention to transfer funds was what defined a transaction. To the extent that transactions should be limited to funding that was actually transferred, I run a robustness test on the transaction regressions, but limiting the dependent variables to include dollars pledged and number of backers for those projects that received money. Results (not reported) are consistent with the primary results.

5.5.2 "Placebo" test

As a final robustness test, I conduct a "placebo" test. For each of the 72 stars, I randomly assign the platform the star is hosted on and the category of the star. I

[16]The coefficients for the triple interaction terms for the pledged and backers regressions are -0.898 ($p < 0.141$) and -0.549 ($p < 0.001$) in the design category and -0.473 ($p < 0.026$) and -0.771 ($p < 0.003$) in the technology category.

then reproduce the models from Table 4. In this placebo experiment (not reported), both coefficients of interest are statistically indistinguishable from zero in all three regressions. In fact, all coefficients—*post*, *star platform* × *post*, *star category* × *post*, and *star platform* × *star category* × *post*—are not statistically significant at the 10% level of confidence, with the exception of the *post* coefficient ($\beta = -0.046, p < 0.097$) in the *pledged* regression. The lack of results implies that all the trends in entrants, dollars pledged, and backers are explained by the time fixed effects in the placebo study.

6 Discussion

In this paper, I find that star users arriving on one side of a platform impact its growth and liquidity, but not all stars are equal. The effect of the star is always within the context of the hosting platform, characteristics of the star, and users on the other side of the platform. While stars on the dominant platform are associated with positive growth for that platform, they also appear to be driving a disproportionately greater share of growth to competing platforms. In addition, some stars promote transactions for all other users and others promote transactions more for similar projects. Finally, certain kinds of star attract users on the other side that are more or less likely to engage with the wider platform.

The results from this paper suggest that high performing, or star, sellers appearing on a dominant platform effectively create a positive externality for competing platforms, where these platforms experience a proportional increase in seller partic-

ipation and transactions. The competing platform likely needs to be of some level of quality to capture the externality, but star sellers appear to mitigate the 'lock-in' a dominant platform would enjoy with large number of users and indirect network effects. That negative competitive effect for the dominant platform is mitigated for sellers in a similar product space as the star, suggesting a positive impact for sellers and transactions similar to the star within the dominant platform. The above described average effect within the platform is reversed for the highest performing sellers and for stars in certain categories.

How should a platform manager incorporate stars into developing a competitive and growth strategy? These results suggest that managers of platforms would benefit from understanding the mix of buyers across verticals within the platform to understand when stars would benefit the platform overall, or some smaller subset of sellers. By appreciating the likely differences in kinds of prospective stars, a manager could seek out sellers that are potential high performers particularly in areas where high performance would lead to the appropriate spillovers within the platform. Managers of smaller, competing platforms may especially benefit from the identification and participation of stars. For smaller, competing platforms, the impact of star users creating temporary surpluses may incentivize platforms to deviate from equilibrium pricing to capture rents (Armstrong, 2006). In general, considering agent heterogeneity and the interacting dynamics within one side of a platform, across sides of a platform, and across platforms provide insight into the potential success of a platform.

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Table 1: Platform summary statistics

	Mean	S.D.	Median	Min	Max
Indiegogo ($n = 103,470$)					
pledged	1,812.89	17,586.70	100.00	0.00	1,961,862.00
backers	23.71	217.99	3.00	0.00	33,253.00
goal	31,588.87	209,670.40	5,000.00	435.75	9,000,000.00
duration	51.04	33.33	45.00	0.00	916.00
fixed funding	0.05	0.23	0.00	0.00	1.00
updates	2.27	6.09	0.00	0.00	247.00
comments	9.31	91.52	2.00	0.00	17,675.00
received money	0.96	0.20	1.00	0.00	1.00
Kickstarter ($n = 116,228$)					
pledged	7,972.75	67,578.90	1,384.00	0.00	10,266,846.00
backers	106.43	844.49	24.00	0.00	91,585.00
goal	15,861.26	86,202.66	5,000.00	101.00	8,000,000.00
duration	35.70	14.70	30.00	1.00	91.00
fixed funding	1.00	0.00	1.00	1.00	1.00
updates	4.77	7.94	2.00	0.00	301.00
comments	31.67	996.73	0.00	0.00	145,900.00
received money	0.48	0.50	0.00	0.00	1.00
Total ($n = 219,698$)					
pledged	5,071.68	50,706.65	525.00	0.00	10,266,846.00
backers	67.47	633.54	10.00	0.00	91,585.00
goal	23,268.41	157,153.16	5,000.00	101.00	9,000,000.00
duration	42.92	26.38	35.00	0.00	916.00
fixed funding	0.55	0.50	1.00	0.00	1.00
updates	3.59	7.23	1.00	0.00	301.00
comments	21.14	727.77	1.00	0.00	145,900.00
received money	0.70	0.46	1.00	0.00	1.00

Note: Summary statistics include the 72 stars separately summarized in Table 2.

Table 2: Star summary statistics ($n = 72$)

	Mean	S.D.	Median	Min	Max
pledged	741,388.74	1,731,498.82	149,447.00	30,743.00	10,266,846.00
backers	8,113.00	17,964.62	2,095.00	121.00	91,585.00
goal	136,050.83	294,463.80	45,000.00	2,000.00	2,000,000.00
duration	38.49	15.17	31.00	2.00	85.00
fixed funding	1.00	0.00	1.00	1.00	1.00
updates	27.54	18.41	25.00	0.00	112.00
comments	1,898.44	5,257.43	306.00	0.00	30,023.00

Note: Summary statistics for 72 star projects identified on Kickstarter platform (listed in Table A1.

Table 3: Sample summary statistics ($n = 74,142$)

	Mean	S.D.	Median	Min	Max
entrants	37.27	51.36	18.00	0.00	360.00
pledged	167,909.62	461,660.98	28,854.00	0.00	10,929,538.00
backers	2,273.36	6,041.58	427.00	0.00	116,224.00
star platform	0.50	0.50	1.00	0.00	1.00
star category	0.08	0.27	0.00	0.00	1.00
post	0.50	0.50	1.00	0.00	1.00
Goal	696,825.04	2,166,853.09	139,424.03	0.00	107,177,346.00
Mean duration	43.06	20.40	41.92	0.00	312.00

Note: An observation is a star-platform-category-week.

Table 4: Star impact on entry and transactions

	(1) entrants	(2) pledged	(3) backers
Star platform x Star category x Post	0.063+	0.199*	0.197*
	(0.04)	(0.08)	(0.09)
Star platform x Post	-0.212**	-0.192**	-0.192**
	(0.02)	(0.05)	(0.05)
Star category x Post	-0.037	-0.117	-0.101
	(0.03)	(0.09)	(0.09)
Post	0.110**	0.111**	0.120*
	(0.02)	(0.04)	(0.05)
Year FE	Yes	Yes	Yes
Month FE	Yes	Yes	Yes
Project characteristics	No	Yes	Yes
Star-platform-category FE	Yes	Yes	Yes
Observations	74142.00	72962.00	72962.00
Star-platform-categories	1857.00	1826.00	1826.00
Log likelihood	-252169.52	-2.84e+09	-3.50e+07

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$.

Note: Models estimated using Poisson regression with quasi-maximum likelihood standard errors, clustered at star project (in parentheses). The dependent variable (labeled at top of column) is count of entrants, number of dollars pledged, and count of backers in each column, respectively. The sample window includes from 20 weeks prior to launch and 20 weeks after the completion of each star. All samples include a stack of observations for 72 Kickstarter stars. An observation is a star-platform-category by week.

Table 5: Indiegogo star impact

	(1) entrants	(2) pledged	(3) backers
Star platform x Star category x Post	0.029	0.151	0.296**
	(0.04)	(0.17)	(0.10)
Star platform x Post	0.084+	0.190+	0.095
	(0.05)	(0.10)	(0.08)
Star category x Post	0.037	-0.082*	-0.149*
	(0.05)	(0.03)	(0.07)
Post	-0.137**	-0.058	0.041
	(0.01)	(0.05)	(0.04)
Year FE	Yes	Yes	Yes
Month FE	Yes	Yes	Yes
Project characteristics	No	Yes	Yes
Star-platform-category FE	Yes	Yes	Yes
Observations	3120.00	3120.00	3120.00
Star-platform-categories	78.00	78.00	78.00
Log likelihood	-12396.14	-1.84e+08	-2348112.63

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$.

Note: Models estimated using Poisson regression with quasi-maximum likelihood standard errors, clustered at star project (in parentheses). The dependent variable (labeled at top of column) is count of entrants, number of dollars pledged, and count of backers in first three columns and second three columns for two subsamples. The sample window includes from 20 weeks prior to launch and 20 weeks after the completion of each star. All samples include a stack of observations for three Indiegogo stars. An observation is a star-platform-category by week.

Table 6: Crowdfunding 'superstar' impact on entry and transactions

	(1) entrants	(2) pledged	(3) backers
Star platform x Star category x Post	0.148	-0.517	-0.464+
	(0.23)	(0.41)	(0.28)
Star platform x Post	-0.254**	0.082*	0.071
	(0.08)	(0.03)	(0.06)
Star category x Post	-0.033	0.982**	0.936**
	(0.25)	(0.29)	(0.24)
Post	0.144**	-0.138**	-0.132*
	(0.05)	(0.04)	(0.06)
Year FE	Yes	Yes	Yes
Month FE	Yes	Yes	Yes
Project characteristics	No	Yes	Yes
Star-platform-category FE	Yes	Yes	Yes
Observations	7902.00	7082.00	7082.00
Star-platform-categories	201.00	179.00	179.00
Log likelihood	-22998.89	-1.64e+08	-2106086.56

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$.

Note: Models estimated using Poisson regression with quasi-maximum likelihood standard errors, clustered at star project (in parentheses). The dependent variable (labeled at top of column) is count of entrants, number of dollars pledged, and count of backers in each column, respectively. The sample window includes from 20 weeks prior to launch and 20 weeks after the completion of each star. All samples include a stack of observations for eight "crowdfunding-wide" superstars (identified in Table A1), all of which were hosted on Kickstarter. An observation is a star-platform-category by week.

Table 7: Stars impact by category: Film and Video and Theater

Category	Film and Video:			Theater:		
	(1) entrants	(2) pledged	(3) backers	(4) entrants	(5) pledged	(6) backers
Star platform x Star category x Post	0.136*	0.377**	0.385**	-0.112*	0.402**	0.512**
	(0.05)	(0.07)	(0.08)	(0.04)	(0.15)	(0.13)
Star platform x Post	-0.256**	-0.388*	-0.375*	-0.283**	-0.541**	-0.618**
	(0.08)	(0.18)	(0.16)	(0.07)	(0.11)	(0.09)
Star category x Post	-0.161**	-0.468**	-0.414**	-0.085	-0.622**	-0.744**
	(0.05)	(0.12)	(0.11)	(0.08)	(0.16)	(0.15)
Post	0.426**	0.440**	0.429**	0.150**	0.654**	0.668**
	(0.14)	(0.17)	(0.16)	(0.05)	(0.09)	(0.09)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Project characteristics	No	Yes	Yes	No	Yes	Yes
Star-platform-category FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9200.00	9120.00	9120.00	4160.00	4160.00	4160.00
Star-platform-categories	230.00	228.00	228.00	104.00	104.00	104.00
Log likelihood	-32964.74	-4.47e+08	-5443604.64	-14693.80	-1.75e+08	-2162585.19

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$.

Note: Models estimated using Poisson regression with quasi-maximum likelihood standard errors, clustered at star project (in parentheses). Columns 1 to 3 present results from nine Kickstarter film and video stars and columns 4 to 6 present results from four Kickstarter theater stars. For each star category, the dependent variable (labeled at top of column) is count of entrants, number of dollars pledged, and count of backers in each column, respectively. The sample window includes from 20 weeks prior to launch and 20 weeks after the completion of each star. All samples include a stack of observations for the appropriate star category. An observation is a star-platform-category by week. To facilitate convergence in all regressions, year fixed effects were aggregated for each two year period.

Table 8: Stars impact by category: Design and Technology

Category	Design:			Technology:		
	(1) entrants	(2) pledged	(3) backers	(4) entrants	(5) pledged	(6) backers
Star platform x Star category x Post	-0.520**	-0.898	-0.549**	0.154	-0.473*	-0.771**
	(0.06)	(0.61)	(0.14)	(0.14)	(0.21)	(0.26)
Star platform x Post	-0.234*	0.024	-0.010	-0.158**	-0.441**	-0.402**
	(0.11)	(0.06)	(0.09)	(0.05)	(0.14)	(0.14)
Star category x Post	0.513**	1.201**	0.774**	0.107+	0.929**	0.979**
	(0.13)	(0.34)	(0.07)	(0.06)	(0.30)	(0.36)
Post	0.082	-0.123*	-0.073+	0.291**	0.788**	0.791**
	(0.08)	(0.06)	(0.04)	(0.07)	(0.07)	(0.07)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Project characteristics	No	Yes	Yes	No	Yes	Yes
Star-platform-category FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5200.00	5120.00	5120.00	5160.00	5120.00	5120.00
Star-platform-categories	130.00	128.00	128.00	129.00	128.00	128.00
Log likelihood	-16276.19	-1.23e+08	-1646091.47	-18053.29	-1.89e+08	-2303470.61

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$.

Note: Models estimated using Poisson regression with quasi-maximum likelihood standard errors, clustered at star project (in parentheses). Columns 1 to 3 present results from five Kickstarter design stars and columns 4 to 6 present results from five Kickstarter technology stars. For each star category, the dependent variable (labeled at top of column) is count of entrants, number of dollars pledged, and count of backers in each column, respectively. The sample window includes from 20 weeks prior to launch and 20 weeks after the completion of each star. All samples include a stack of observations for the appropriate star category. An observation is a star-platform-category by week. To facilitate convergence for the regressions of technology stars (Columns 4, 5, and 6), year fixed effects were aggregated for each two year period.

Table A1: Star projects

Project	Category	Start Date	End Date	Goal	Pledged	Crowdfunding-wide?
The Vanderbilt Republic Foundation: "Masters"	Art	04aug2009	04oct2009	50,000	50,265	Yes
Designing Obama	Art	16sep2009	05nov2009	65,000	84,614	Yes
Greenlight the PATROL BASE JAKER Movie	Film and Video	16jan2010	22feb2010	45,000	45,535	No
STUFFER	Film and Video	05jan2010	31mar2010	32,500	57,160	No
The Chris Knox Benefit Concert	Music	30mar2010	01apr2010	37,500	40,555	No
Decentralize the web with Diaspora	Technology	24apr2010	02jun2010	10,000	200,642	Yes
CRUDE Fight for the First Amendment	Publishing	20may2010	30jun2010	20,000	30,743	No
Mystery Brewing Company: A Non-Traditional Approach to Artisanal Ales	Food	16may2010	24jul2010	40,000	44,259	No
Musopen: Record and release free music without copyrights.	Music	16aug2010	15sep2010	11,000	68,360	No
Lockpicks by Open Locksport	Design	15jul2010	24sep2010	6,000	87,408	No
GAMEFUL, a Secret HQ for Worldchanging Game Developers	Games	22aug2010	29sep2010	2,000	64,966	No
Cursed Pirate Girl: "Our Generation's Alice in Wonderland" Jeremy Bastian comic book	Comics	14sep2010	14oct2010	2,500	36,018	No
SAVE Blue Like Jazz! (the movie)	Film and Video	24sep2010	26oct2010	125,000	345,992	Yes
REVERENCE	Photography	30sep2010	31oct2010	50,000	50,016	No
Glif - iPhone 4 Tripod Mount & Stand	Design	04oct2010	03nov2010	10,000	137,417	No
Reopen the Parkway Theater!	Theater	04oct2010	03dec2010	50,000	56,832	No
Search & Restore documents and unites the new jazz scene!	Music	05oct2010	06dec2010	75,000	76,823	No
TikTok+LunaTik Multi-Touch Watch Kits	Design	17nov2010	17dec2010	15,000	942,578	Yes
The TRANSMETROPOLITAN art book	Comics	10dec2010	15feb2011	26,000	46,690	No
Vere Sandal Company, USA - 2011 Collection	Fashion	03jan2011	01mar2011	12,000	56,619	No
The Manual	Publishing	08feb2011	10mar2011	40,000	53,291	No
The Brotherhood of the Screaming Abyss!	Publishing	07apr2011	06jun2011	80,000	85,750	No
Naked Sea Spencer Tunick Dead Sea Installation	Art	26apr2011	06jun2011	60,000	116,270	No
Build DC Public School Kids a FoodPrints Teaching Kitchen!	Food	18may2011	15jun2011	60,000	60,409	No
New Broadway Musical: ONE FOR MY BABY	Theater	20apr2011	19jun2011	50,000	67,606	No
Julia Nunes would be nothing without me	Music	11jun2011	11jul2011	15,000	77,888	No
HexBright, an Open Source Light	Technology	21may2011	19jul2011	31,000	259,294	No
Womanthology; Massive All Female Comic Anthology!	Comics	07jul2011	08aug2011	25,000	109,302	No
Glory To Rome [[Black Box Edition]] Rome Demands BEAUTY!	Games	01aug2011	22aug2011	21,000	73,103	No
Nataly Dawn's first solo album	Music	18jul2011	06sep2011	20,000	104,788	No
Alien Frontiers: Factions	Games	01sep2011	02oct2011	15,000	76,078	No
An Evening With Neil Gaiman & Amanda Palmer	Music	06sep2011	03oct2011	20,000	133,342	No
VENUS PATROL: charting a new course for videogame culture	Games	07sep2011	07oct2011	50,000	105,398	No
Brand New Windowfarms- Vertical Food Gardens	Food	17nov2011	08dec2011	50,000	257,308	No
D-Day Dice Board Game	Games	30oct2011	09dec2011	13,000	171,805	No
Printrbot: Your First 3D Printer	Technology	17nov2011	17dec2011	25,000	830,828	No

Continued on next page

Table A1 – *Continued from previous page*

Project	Category	Start Date	End Date	Goal	Pledged	Crowdfunding-wide?
The Versalette by {r}evolution apparel	Fashion	17nov2011	23dec2011	20,000	64,246	No
New Five Iron Frenzy Album!!!!	Music	23nov2011	22jan2012	30,000	207,980	No
Elevation Dock: The Best Dock For iPhone	Design	13dec2011	11feb2012	75,000	1,464,707	Yes
The Order of the Stick Reprint Drive	Comics	22jan2012	21feb2012	57,750	1,254,120	No
Double Fine Adventure	Games	09feb2012	14mar2012	400,000	3,336,372	Yes
Idle Thumbs Video Game Podcast	Publishing	20feb2012	22mar2012	30,000	136,924	No
MATTER	Publishing	22feb2012	24mar2012	50,000	140,202	No
Pebble: E-Paper Watch for iPhone and Android	Design	11apr2012	19may2012	100,000	10,266,846	Yes
Flint and Tinder: Premium Men's Underwear	Fashion	22apr2012	22may2012	30,000	291,493	No
Amanda Palmer: The new RECORD, ART BOOK, and TOUR	Music	30apr2012	01jun2012	100,000	1,192,793	No
The Olympic City	Photography	30may2012	29jun2012	45,000	66,162	No
Ministry of Supply: The Future of Dress Shirts.	Fashion	08jun2012	11jul2012	30,000	429,277	No
THE ICARUS DECEPTION: WHY MAKE ART? New from Seth Godin	Publishing	18jun2012	17jul2012	40,000	287,342	No
Nomiku: bring sous vide into your kitchen.	Food	18jun2012	18jul2012	200,000	586,061	No
BRIDEGROOM - An American Love Story	Film and Video	19jun2012	19jul2012	300,000	384,376	No
Standard Time - The Workshop	Dance	27jun2012	27jul2012	12,000	31,028	No
Save the Lyric!	Theater	06jul2012	07aug2012	150,000	158,692	No
OUYA: A New Kind of Video Game Console	Games	10jul2012	09aug2012	950,000	8,596,475	No
Ukiyo-e Heroes	Art	01aug2012	31aug2012	10,400	313,341	No
Oculus Rift: Step Into the Game	Technology	01aug2012	01sep2012	250,000	2,437,430	No
The Gamers: Hands of Fate	Film and Video	18jul2012	08sep2012	320,000	405,917	No
Charlie Kaufman's Anomalisa	Film and Video	11jul2012	09sep2012	200,000	406,237	No
Rescue The Historic Catlow Theater From Extinction	Theater	26jul2012	24sep2012	100,000	175,395	No
STILL MOTION presents "Moments Defined"	Dance	17aug2012	16oct2012	25,000	38,570	No
FORM 1: An affordable, professional 3D printer	Technology	26sep2012	26oct2012	100,000	2,945,885	No
"The Goon" Movie... let's KICKSTART this sucker!!!	Film and Video	12oct2012	11nov2012	400,000	441,900	No
YAGP's "Ballet's Greatest Hits" Gala	Dance	21nov2012	17dec2012	35,000	38,752	No
To Be Or Not To Be: That Is The Adventure	Publishing	21nov2012	21dec2012	20,000	580,906	No
GUSTIN: Redefining premium menswear, starting with denim.	Fashion	07jan2013	09feb2013	20,000	449,654	No
Video Game High School: Season Two	Film and Video	11jan2013	12feb2013	636,010	808,341	No
The Veronica Mars Movie Project	Film and Video	13mar2013	13apr2013	2,000,000	5,702,153	No
THE 10-YEAR HOODIE: Built for Life, Backed for a Decade!	Fashion	07mar2013	21apr2013	50,000	1,053,831	No
Planet Money T-shirt	Publishing	30apr2013	14may2013	50,000	590,807	No
ARKYD: A Space Telescope for Everyone	Photography	29may2013	01jul2013	1,000,000	1,505,367	No
Marina Abramovic Institute: The Founders	Art	26jul2013	25aug2013	600,000	661,452	No
Sansaire Sous Vide Circulator	Food	07aug2013	06sep2013	100,000	823,003	No