

Introduction to the Minitrack “Crowd-based Platforms” HICSS 2023

Track:

Internet and the Digital Economy

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1. Introduction

Crowd-based platforms on the Internet harness the wisdom, labor and financial resources from the crowd, to facilitate idea generation, labor exchange and funding of innovative entrepreneurial projects. Crowd-based platforms include online labor markets (e.g., Amazon Mechanical Turk, Freelancer.com), crowdsourcing platforms (e.g., Innocentive.com, Zhubajie.com), crowdfunding marketplaces (e.g., GoFundMe.com, Indegogo.com), online communities (e.g., Facebook.com, Douban.com) and more broadly, gig economy platforms (e.g., Uber, Lyft, AirBnB). The uprising scale and importance of such platforms has revolutionized the digital economy.

Notably, these crowd-based platforms have attracted much research attention in the IS field. The different types of crowd-based platforms offer new opportunities to understand information systems and related problems, such as new product development in crowdsourcing marketplaces (Huang et al. 2014); system design in online labor markets (Hong et al. 2014; Liang et al. 2019); social influence of contribution patterns (Burtch et al. 2013) in crowd funding marketplaces, etc. Hereby, more innovative research is warranted in this research topic, given the scale and societal impact of these platforms.

In this HICSS minitrack, we seek to receive submissions of papers related to these three types of platforms below, with topics including but not limited to the following. We also welcome research using different data and methodologies, such as econometrics, field or laboratory experimentation, analytical model, field surveys, qualitative analyses, or theory-building approaches.

2. Research topics:

- Gig economy platforms
 - 1) Ride sharing platforms (e.g., Uber/Lyft)
 - 2) Lodge sharing platforms (e.g., Airbnb)
 - 3) Online labor markets (e.g., Freelancer/Upwork/Guru/MTurk)
 - 4) Ordering and delivery markets (e.g., Doordash/Grubhub)
 - 5) Economic value of gig economy platforms
- Crowdfunding marketplace
 - 1) Financial technology (i.e., FinTech)
 - 2) Algorithmic bias
 - 3) Social capital
 - 4) Social influence
 - 5) Crowdfunding success factors
 - 6) Machine learning of crowdfunding data
- Two-sided matching markets
 - 1) Platform equality
 - 2) Market design
 - 3) Auction design and performance
 - 4) Information asymmetry
 - 5) Global dynamics
- Online communities
 - 1) User-generated content
 - 2) Incentives
 - 3) Equity, diversity, and inclusion
 - 4) User engagement
 - 5) User participation
 - 6) Online social system design

3. Accepted Papers

1. Impact of Brand Sponsorship on Influencers- Audience Engagement: Evidence from Analyzing YouTube Videos

Authors:

- (1) Shunyuan Zhang
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Abstract:

“The growth of the influencer marketing industry warrants an empirical examination of the effect of posting sponsored videos on an influencer’s reputation. We collect a novel dataset of user-generated YouTube videos created by prominent English-speaking influencers in the beauty and style category. We extract a rich set of theory-driven video features and use DiNardo-Fortin-Lemieux reweighting to construct comparable treatment and control groups that are matched at the influencer-video level. A difference-in-differences analysis on the matched sample finds a reputation-burning effect: posting a sponsored video, compared to posting an equivalent organic video, costs the influencer 0.17% of their reputation (operationalized as the number of subscribers). The reputation-burning effect is stronger among influencers with larger audiences; an analysis of audience engagement and comment text reveals a larger gap in the audience’s response to sponsored vs. organic videos among influencers with larger (vs. smaller) audiences. Our study empirically tests an assumption of several theoretical works, contributes to the literature on influencer marketing and celebrity endorsements, and provides managerial implications for influencers, brands, and social media platforms.”

2. Platform Monetization and Unintended Consequences for Digital Cultural Markets: Evidence from a Two-sided Market for Book Promotions

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Abstract:

“How can a platform capture the value it creates without damaging the balance of its ecosystem? In this study, we leverage a natural experiment on a platform market for books to examine the potential consequences of monetizing a popular promotional program run by the platform. Participating in this program was free for authors and publishers till January 2018, after which Goodreads enacted a policy change and began to charge a fixed participation fee. We collect large-scale data to analyze both the supply side (i.e., authors and publishers) and demand side (i.e., consumers) response to this monetization policy. We document several novel insights about the consequences of monetization that are above and beyond the traditional concern of network effects. Our findings highlight a more complex view of evaluating monetization and suggest that platforms need to counterbalance these effects by offering more flexible incentive structures for different players in its ecosystem.”

3. Boundary Crossing through Text and Image on Instagram in an Online Community of Practice

Authors:

- (1) Pnina Fichman
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Abstract:

“During COVID-19 lockdown many social media challenges captured the attention of users all around the world, and many online communities of practice used social media platforms for their daily interactions. On Instagram these communities gather around common interests through the platform’s sociotechnical affordances. We examined the role that these features play in boundary maintenance processes and boundary crossing practices, analyzing posts from four online communities of practice (CoPs), who were bounded by their hashtags and shared an art recreation challenge that was popular on Instagram at the start of COVID-19 lockdown. We found that while some practices are shared across CoPs, boundary maintenance processes sometimes are not, and the boundaries of some of these CoPs are more permeable than others. Cultural differences, language, and script were critical for boundary maintenance regardless of the platform’s visual affordances that served the boundary crossing practices.”

4. Contract Choice, Moral Hazard, and Performance Evaluation: Evidence from Online Labor Markets

Authors:

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Abstract:

“Due to the spatial and temporal separations between clients and freelancers, online labor markets (OLMs) are particularly susceptible to issues related to information asymmetry. Based on the economics of information, we hypothesize that the choice of contract type—i.e., between the fixed-priced (FP) contract and the time-and-materials (TM) contract—has important implications for curbing moral hazard during contract execution, and therefore will influence the client’s perceived contractual performance upon project completion. We test the predictions by assembling a dataset of data analytics projects completed by freelancers on Upwork, the largest online freelancing platform. We find that, consistent with our hypothesis, freelancers under a TM contract receive significantly lower performance ratings by their clients on average compared to those under an FP contract. Interestingly, we also find that the level of expertise required for a project moderates the effect of contract choice on client satisfaction; the negative impact of a TM contract is smaller (i.e., less negative) when a project requires intermediate-level or expert-level skills. Our study offers useful insights into an important institutional determinant of contractual performance evaluation, which has profound implications for freelancers’ reputations in OLMs.”

5. Quantifying Learning and Competition among Crowdfunding Projects: Metrics and a Predictive Model

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Abstract:

“The performance of a crowdfunding project is highly situational-dependent. In this study, we quantify the interactions between crowdfunding

projects in order to understand how these interactions can help predict the performance of crowdfunding campaigns. Specifically, we utilize Natural Language Processing (NLP) techniques to create a semi-automated system to label the associated product for each crowdfunding campaign. We also propose three sets of metrics to measure how crowdfunding projects learn from and compete with each other. Finally, we propose a machine learning model and demonstrate that the proposed metrics and the proposed model outperform other combinations when predicting the performance of crowdfunding projects.”

6. Two-Sided Sharing Platforms: Sell Upfront Subscriptions or Not?

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Abstract:

“Two-sided sharing platforms match independent third-party service providers (i.e., supply) to consumers (i.e., demand). Unlike firms that employ their own stable supply, a two-sided sharing platform only has an indirect control over the supply side through wage, and its marginal service cost depends on the number of consumers who need the service, i.e., demand potential, and the number of providers who are available to serve, i.e., supply potential. Furthermore, demand potential and supply potential change over a relatively short period, creating variability on the demand side as well as the supply side. Offering a subscription option with an upfront fee is a widely adopted firm strategy to smooth out the demand-side variability. However, whether this strategy is profitable for a two-sided sharing platform is unclear, although some platforms have been experimenting with subscription models. In this paper, we examine a monopolistic sharing platform’s decision on offering a subscription option, when it faces consumers/providers with uncertain valuation/cost and heterogeneous need frequencies. We find that the platform’s incentive to offer a subscription option hinges on the provider-to-consumer coverage ratio, defined as the ratio of the number of providers to the number of consumers, in the market: (i) when the ratio is low, offering a subscription option is sub optimal; (ii) when the ratio moderate, offering a subscription option that would

induce only frequent consumers to subscribe (mixed subscription) is optimal; (iii) when the ratio is high, offering a subscription option that would induce all consumers to subscribe (pure subscription) is optimal. We also identify the effects of demand variability and supply variability on the platform's incentive to offer the subscription option."

7. Voters' Impacts on Creators' Popularity Disparity and Network Size in Two-sided Decentralized User-Generated Content Market

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Abstract:

"The development of decentralized technologies greatly facilitates the growth of user-generated content (UGC) markets. However, existing literature debates whether the decentralized UGC platform model can be economically sustainable. This study investigates the differential impacts of four voter groups, categorized by their social engagement and financial investment, on the two critical issues pertaining to decentralized UGC markets (i.e., creator popularity disparity and content contribution). We empirically tested our hypotheses using data from a leading decentralized UGC platform. The results indicate a consumer engagement tradeoff between promoting fair growth opportunities in the interest of the creators and extending the creator network in the interest of the platform. Our findings shed light on how creator popularity disparity may arise through votes from the four voter groups and their differential network externalities exerted on the creator network."

8. Does regulation help? The impact of California's AB5 on Gig Workers

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Abstract:

"There is a widespread debate over how gig workers should be classified. The passage of California Assembly Bill 5 (AB5) - a landmark legislation that aims to correct the misclassification of gig workers, has significant implications for workers, platforms, regulators, and the economy. In this research, leveraging the passage of AB5 as a shock for a natural experiment, we empirically investigate the impact of AB5 on gig workers in California to provide insights. With the data collected from a leading online labor market that connects clients and gig workers, we applied a Difference in Difference approach, and we found that the monthly earnings of gig workers in California, compared to those in other states, have a significantly higher increase after AB5 was signed into law. This effect stems from both increased daily earnings and increased working days. We discuss the implications for policymakers and platforms."

9. Content Creator versus Brand Advertiser? The Effect of Inserting Advertisements in Videos on Influencers Engagement

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Abstract:

"Influencer advertising has become an indispensable component of online marketing due to the exponential growth of social influencers and their influence. Whereas the effectiveness of using influencer endorsements is well studied from the brand or company perspective, how the commercial endorsements affect influencers themselves is an important yet unrevealed question. We empirically examine the instantaneous (measured using live comment sentiment) and longer-term (measured using video feedback and follower number change) influence of inserting advertisements in videos on influencers' reputation. We further investigate how this effect can be moderated when influencers demonstrate stronger endorsement by showing their faces during advertisements. Our result suggests that inserting advertisements have a negative impact on

both instantaneous and longer-term viewer engagement; advertisements with influencers' face showing moderate the negative effect of advertisements on viewers' instantaneous response, while the different impact between advertisements with/out influencers showing their faces is not significant in the longer term."

10. Signaling in Donation Crowdfunding: The Role of Mixed Product and Ideological Bundling

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Abstract:

"Crowdfunding projects depend on signalling to demonstrate authenticity. However, literature on signalling has focused on investment and reward crowdfunding with lesser emphasis on donation crowdfunding. This study adopts the signalling theory and bundling concepts to explore the impact of two validation mechanisms on donation crowdfunding outcomes. Drawing from the literature on bundling and signalling, we investigate the impact of a mixed product bundling strategy (community pot mechanism) and ideological bundling strategy (third-party signalling) on donation project success. Based on data from Mchanga.com, our findings indicate that the mixed product bundling strategy positively influences project amount of funds raised and backer support. However, we also find preliminary evidence indicating ideological bundling can have undesirable and contrasting effects on project outcomes. Implications and future work are also discussed."

11. The Value of Social Media Customer Support During the Pandemic

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Abstract:

"Many companies are utilizing social media as the primary avenue for customer service during the pandemic. However, how customers' behaviors and interactions with customer service agents on social media are impacted by the lockdowns has not been well understood. In this study, we examine the impact of lockdowns and physical distancing on changes in customers' behaviors, such as emotional expressions in tweets and customers' satisfaction with social media customer service. Using a difference-in-differences research design, we find that with the lockdowns and physical distancing, customers expressed more negative emotions when tweeting the company they were having issues with. Surprisingly, compared to before the pandemic period, customers' emotional expressions became more positive and they were more likely to express their satisfaction after interacting with customer service agents. Interestingly, our findings reveal that gender differences exist in these scenarios. We also discuss the theoretical and practical implications of these findings."