Leveraging Institutional Intermediaries: Entrepreneurial Strategies to Contact Investors on a Fundraising Platform

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How do entrepreneurs leverage institutional intermediaries to acquire financial resources? We tackle this question by examining entrepreneurial strategies to contact investors on a fundraising platform. Using data from a Chinese platform that connects entrepreneurs with investors, we find that the effects of institutional intermediaries depend on how entrepreneurs leverage them. Specifically, we find that stepping-stone strategies are rewarded, whereas status-picking strategies are penalized online. Moreover, we find that stepping-stone strategies are more beneficial in less developed regions, whereas status-picking strategies are less penalized in more developed regions. This paper contributes to prior literature on institutional intermediaries, network tie formation, and platforms. First, while prior work focuses on how institutional intermediaries impact entrepreneurs, we explore how entrepreneurs leverage intermediaries. Second, we contribute to network dynamics by investigating sequential attempts for initial tie formation and discussing initial tie formation through online intermediaries. Finally, while prior work on platforms focuses on the strategy of platform providers, this paper examines the strategy of platform users.

Keywords: Entrepreneurial Strategy, Institutional Intermediary, Entrepreneurial Finance, Tie Formation, Platform
Introduction

Institutional intermediaries are “agents whose activities have the potential to create institutions” (Dutt et al., 2016) by connecting unconnected actors to enable activities that would not readily occur otherwise (Eberhart, Eesley, & Eisenhardt, 2017). Prior research on institutional intermediaries mainly discusses two types of benefits on entrepreneurship – building capabilities and providing credentials. First, institutional intermediaries enable certain capability-building activities that would not be possible in their absence (Armanios, Eesley, Li, & Eisenhardt, 2016; Dutt et al., 2016; Siegel, Westhead, & Wright, 2003). Second, institutional intermediaries can redefine market boundary and legitimize new actors in a new market (Mair, Marti, & Ventresca, 2012).

While prior papers have unpacked the effects of institutional intermediaries on entrepreneurs, the flip side of the story is missing – how do entrepreneurs leverage institutional intermediaries? In particular, Eberhart et al. (2017) find that institutional intermediaries may also negatively impact entrepreneurial growth. In other words, institutional intermediaries don’t always benefit entrepreneurship, but we lack an understanding of the contingency effects. We propose that the effects depend on a fit between the type of institutional intermediaries and the type of entrepreneurial strategies to leverage the intermediaries.

Also, prior research focuses mostly on offline institutional intermediaries, but online institutional intermediaries are less well understood. However, it’s important to examine online intermediaries, because the role of offline institutional intermediaries tends to be geographically restricted. For example, science parks are usually established by the local government and thus they are more likely to support local entrepreneurs (Armanios et al., 2016; Phan, Siegel, & Wright, 2005; Tan, 2006). The problem is that such local institutional intermediaries tend to concentrate
in regions where private sector funding is better developed. In other words, entrepreneurs in less developed regions may not be able to utilize local institutional intermediaries to get access to early-stage funding. To address this problem, we propose that online platforms serve as online institutional intermediaries that connect entrepreneurs with investors across regions.

Online intermediaries differ from the offline intermediaries in the regulatory, normative, and cognitive perspectives. First, from the regulatory perspective, online institutional intermediaries pose lower entry barriers than offline intermediaries (Chang & Wu, 2014; Eesley, 2016). Second, from the normative perspective, online intermediaries make it proper to form distant connections without friends’ introduction (Agrawal, Catalini, & Goldfarb, 2015; Sorenson & Stuart, 2001, 2008). Third, from the cognitive perspective, online intermediaries trigger more casual mental model metaphors to other online activities such as online chatting or tweeting (Gary, Wood, & Pillinger, 2012; Grégoire, Barr, & Shepherd, 2010).

Given the above features of online institutional intermediaries, how can entrepreneurs strategically take advantage of them? Specifically, we ask: How do entrepreneurs strategically leverage online institutional intermediaries to acquire resources? We focus on the sequence of contacting investors and propose two types of strategies – stepping-stone strategy and status-picking strategy. A stepping-stone strategy means contacting low-rank investors to get initial replies, which could be used as stepping stones to contact higher-rank investors later on. On the contrary, a status-picking strategy starts with high-rank investors first.

To empirically tackle this question, we collected data from an online fundraising platform in China, including detailed information on the entrepreneurs, entrepreneurial projects, investors, and the interactions between entrepreneurs and investors on the platform. We find that the effects of institutional intermediaries depend on how entrepreneurs leverage them. Specifically, we find
that stepping-stone strategies are rewarded, whereas status-picking strategies are penalized online. Moreover, we find that stepping-stone strategies are more beneficial to entrepreneurs in less developed regions. In contrast, entrepreneurs in more developed regions are less penalized by taking the status-picking strategy.

This paper contributes to prior literature on institutional intermediaries, network tie formation, and platforms. First, while prior work focuses on how institutional intermediaries impact entrepreneurs (Armanios et al., 2016; Dutt et al., 2016; Eberhart et al., 2017), we explore how entrepreneurs leverage intermediaries. Specifically, prior work takes a largely deterministic view that institutional intermediaries help entrepreneurs overcome institutional voids and promote venture growth (Armanios et al., 2016; Dutt et al., 2016), but neglects the strategic agency of entrepreneurs. We address this gap by proposing that the impact of institutional intermediaries may differ with different entrepreneurial strategies to leverage the intermediaries. In this online fundraising setting, a stepping-stone strategy works better than a status-picking strategy to help entrepreneurs form initial ties with investors.

Second, network dynamics (Davis, 2016; Powell, White, Koput, & Owen-Smith, 2005), particularly the formation of networks (Hallen, 2008; Hallen & Eisenhardt, 2012; Zaheer & Soda, 2009), are not well understood in prior literature. We address this gap by investigating sequential attempts for initial tie formation and discussing initial tie formation online versus offline. Specifically, prior work on network tie formation emphasizes the “rich-get-richer” dynamism (Powell, Koput, & Smith-doerr, 1996; Powell et al., 2005), but the initial tie formation leaves largely unexplored. Hallen (2008; 2012) proposes that entrepreneurs can use catalyzing strategies to form initial ties, but it may take a relatively long time to repeatedly date a few investors and to wait until proof points. Adding to this idea of catalyzing strategies, we propose that entrepreneurs
could use a stepping-stone strategy, which is facilitated by online platforms because entrepreneurs are able to form weak ties with easily approachable investors without spending much time or making much commitment.

Finally, while prior work on platforms focuses on the strategy of platform providers (Boudreau, 2010; Eisenmann, Parker, & Van Alstyne, 2006; Rochet & Tirole, 2003), this paper examines the strategy of platform users. Specifically, most platform literature focuses on how platform creators design a two-sided market to attract both suppliers and consumers to the platform (Boudreau, 2010; Eisenmann et al., 2006; Rochet & Tirole, 2003). These papers usually use mathematical models or simulations to develop the theory but tends be criticized as atheoretical from an organizational theory perspective. This paper addresses this gap by conceptualizing platforms as an online institutional intermediary, which enables increased width and frequency and decreased commitment in initial tie formation. Further, we explore how entrepreneurs as platform users can strategically leverage these features to more effective form initial ties on the platform.

Overall, this paper conceptualizes online fundraising platforms as a new type of institutional intermediaries, proposes two types of tie formation strategies through platforms, and examines how the effectiveness of these two strategies are moderated by offline institutional environment. In the following sections, we are going to fully develop the hypotheses, explain the research contexts, and discuss the empirical results.

**Theory and Hypotheses**

*The Effects of Institutional Intermediaries on Entrepreneurship*
Institutions are defined as the regulative, normative, and cognitive elements that “provide stability and meaning to social life” (Scott, 2013). Institutional theory has diverse branches within organizational studies. For example, scholars following North (1990)’s tradition tend to focus on regulatory institutions. Studies following the footsteps of DiMaggio & Powell (1983) tend to emphasize the cultural-cognitive dimension. Studies adopting Scott (2013)’s definition often discusses all three pillars of institutions (e.g. Eberhart et al., 2017; Eesley, Li, and Yang, 2016; Gurses and Ozcan, 2015; Hiatt, Sine, and Tolbert, 2009). In this paper, we define institutions as the composite of regulatory, normative, and cognitive elements that provide guidance, appropriateness, and meaning to social activities.

Intermediaries are agents that bring about activities by connecting previously unconnected actors (Dutt et al., 2016; Eberhart et al., 2017). Management scholars have discussed two types of intermediaries – information intermediary and institutional intermediary. Financial scholars focus more on information intermediaries, such as proxy advisors and financial data providers (Akbas, Markov, Subasi, & Weisbrod, 2018; Sauerwald, van Oosterhout, Van Essen, & Peng, 2018; Schaub, 2018). These intermediaries play a central role in facilitating or manipulating information flow, which significantly impacts financial market performance. In contrast, studies on institutional intermediaries emphasizes their role in assisting or stunting firm creation and growth (Armanios et al., 2016; Dutt et al., 2016; Eberhart et al., 2017; Mair et al., 2012). Along this line, we also focus on the effect of institutional intermediaries in the entrepreneurial setting.

Institutional intermediaries are “agents whose activities have the potential to create institutions” (Dutt et al., 2016) by connecting unconnected actors to enable activities that would not readily occur otherwise (Eberhart et al., 2017). Prior research on institutional intermediaries mainly discusses two types of benefits on entrepreneurship – building capabilities and providing
credentials. First, institutional intermediaries enable certain capability-building activities that would not be possible in their absence. For example, science parks serve as an institutional intermediary between entrepreneurs and government resources. By bridging the gap between private and public sector, science parks provide unique opportunities to collaborate with universities and get access to government funding (Armanios et al., 2016; Eesley, Wu, & Yang, 2017; Siegel et al., 2003). Similarly, Dutt et al. (2016) find that government, academic, and NGO-sponsored incubators can enhance business capability development in their corresponding sectors.

Second, in addition to capability building, institutional intermediaries also confer credentials to entrepreneurs. On one hand, institutional intermediaries can redefine market boundary and legitimize new actors in a new market. For example, Mair et al. (2012) find that a Bangladesh NGO serves as an intermediary to create an inclusive market that allow women to access and participate in the market. Similarly, Sutter et al., (2017) find that a Nicaragua NGO provided “institutional scaffolding” to facilitate dairy farmers’ transition from informal to formal markets. On the other hand, institutional intermediaries can legitimize new actors in an existing market. This legitimation can simply be the outcome of affiliation with intermediaries, because being selected by the intermediaries signals firm quality and confers organizational legitimacy (Armanios et al., 2016; Bermiss, Hallen, Mcdonald, & Pahnke, 2016; Plummer, Allison, & Connelly, 2016).

Overall, prior papers have unpacked the effects of institutional intermediaries on entrepreneurs. However, the flip side of the story is missing – how do entrepreneurs leverage institutional intermediaries? In particular, Eberhart et al. (2017) find that institutional intermediaries may also negatively impact entrepreneurial growth, because of institutional conflicts between the new practices of the intermediary and the established practices of the existing
institutions. In other words, institutional intermediaries don’t always benefit entrepreneurship, but we lack an understanding of the contingency effects. We argue that the effects depend on a fit between the type of institutional intermediaries and the type of entrepreneurial strategies to leverage the intermediaries. In the next section, we will discuss the differences between online and offline institutional intermediaries. Following that, we will discuss two types of entrepreneurial strategies to leverage online institutional intermediaries.

*Online versus Offline Institutional Intermediaries*

While prior research focuses mostly on offline institutional intermediaries, online institutional intermediaries are less well understood. However, it’s important to examine online intermediaries, because the role of offline institutional intermediaries tends to be geographically restricted. For example, science parks are usually established by the local government and thus they are more likely to support local entrepreneurs (Armanios et al., 2016; Phan et al., 2005; Tan, 2006). Considering the regional disparity in China, such local institutional intermediaries also tend to concentrate in regions where private sector funding is better developed. In other words, entrepreneurs in less developed regions may not be able to utilize local institutional intermediaries to get access to early-stage funding. To address this problem, we propose that online platforms serve as online institutional intermediaries that connect entrepreneurs with investors across regions.

Online intermediaries differ from the offline intermediaries in the regulatory, normative, and cognitive perspectives. First, from the regulatory perspective, online institutional intermediaries pose lower entry barriers than offline intermediaries (Chang & Wu, 2014; Eesley, 2016). Offline intermediaries, such as science parks and incubators, (Armanios et al., 2016; Dutt et al., 2016), have strict screening and selection processes. In contrast, most online platforms do
not have such a selection process, because platforms are in the winner-take-all situation where more users will generate larger network effects to tip the market.

Second, from the normative perspective, online intermediaries make it proper to form distant connections without friends’ introduction (Agrawal et al., 2015; Sorenson & Stuart, 2001, 2008). While offline institutional intermediaries also connect previously unconnected parties, their role tends to be geographically restricted because participants tend to be local entrepreneurs. In contrast, online institutional intermediaries enable a new networking mode that facilitate distant tie formation. For example, while getting a phone call from an unknown number in another state raises alert, receiving an online greeting from a distant stranger seems to be appropriate.

Third, from the cognitive perspective, online intermediaries trigger more casual mental model metaphors to other online activities such as online chatting or tweeting (Gary et al., 2012; Grégoire et al., 2010). While interactions in the offline institutional intermediaries tend to be formal and professional, interactions in the online institutional intermediaries tend to be more casual. Even for the same activity – chatting with investors to raise money, online chatting tends to use emojis and a more casual tone than offline communications. The reason is that communication patterns are influenced by the mental model metaphors of similar activities in the same institutional setting. In the online institutional setting, such mental models include tweeting, facebook messaging, online dating, among others.

Due to the above differences between online and offline institutional intermediaries, the effect of online intermediaries on entrepreneurship also differ from that of offline intermediaries. On one hand, online institutional intermediaries are more beneficial for capability building, due to a wider range, less frictions, and higher frequency of communications. On the other hand, online
institutional intermediaries are less beneficial for conferring credentials, due to lower entry barriers (Chang & Wu, 2014; Eesley, 2016).

**Online Institutional Intermediaries and Tie Formation**

The above features of online institutional intermediaries enable the formation of many weak ties between individuals. In contrast, offline networks usually have clusters of strong connections, and a few weak ties between individuals (Granovetter, 1973). For example, in early-stage fundraising, investors usually search for deals through their network ties (Maula, Keil, & Zahra, 2013; Shane & Cable, 2002; Sorenson & Stuart, 2001), and entrepreneurs also rely on their network connections to get introduced to investors (Hallen, 2008; Hallen & Eisenhardt, 2012; Plummer et al., 2016). We call this pattern “point-to-point” tie formation. Through online intermediaries, however, entrepreneurs can easily get a list of investors and reach out to their preferred ones through the platform. We call this pattern a “map-based” tie formation. It should be noted that ties formed through this “map-based” pattern tend to be initially weaker than ties formed through a “point-to-point” introduction. However, online platforms enable entrepreneurs to form initial weak ties with a large number of investors whom they cannot reach out to otherwise. Following the initial tie formation online, entrepreneurs may strengthen these weak ties through follow-up interactions, both online and offline.

Therefore, online intermediaries help resolve a major difficulty in venture fundraising - building initial network connections with investors (Hallen, 2008; Hallen & Eisenhardt, 2012). Prior work proposes that entrepreneurs could utilize catalyzing strategies to raise initial funding without prior network connections (Hallen & Eisenhardt, 2012). These catalyzing strategies include casual dating, timing around “proof points”, scrutinizing interest, and crafting alternatives.
Similarly, Ozcan and Eisenhardt (2009) propose that entrepreneurs can simultaneously build multiple ties by doing “long jumps”.

However, it is unclear how to both effectively and efficiently build initial network connections in venture fundraising. While catalyzing strategies can be effective in building initial ties, it may take long to establish the connection. For example, causal dating with many investors may be time consuming, and waiting until proof points also takes a relatively long time. In contrast, simultaneous tie formation through “long jumps” is time efficient but may not be effective in the venture fundraising situation. “Long jumps” tend to be effective only when the entrepreneurs occupy a structural hole, where the two parties they try to connect do not know each other. However, in venture fundraising, such a structural hole may not exist, because investors usually know each other well.

Online fundraising platforms enable entrepreneurs to efficiently and effectively build initial network connections, because of increased width, higher frequency, and reduced depth in the attempts to form initial ties online. First, in order to get initial responses from investors, entrepreneurs can contact a wide range of investors, which is costly if not impossible offline. Also, investors are usually too busy to respond to emails from unknown entrepreneurs, because most of these projects tend to be of low quality. Instead, they rely on friends’ introduction to search for good deals. However, online platforms make it easy to contact multiple investors at the same time, and investors can set the criteria for the project they are interested in. Hence, entrepreneurs are able to contact a wide range of investors to get a large number of initial responses.

Second, in addition to contacting a wide range of investors, entrepreneurs can also contact the same investor more than once. Repeatedly contacting shows entrepreneurs’ sincerity in getting in contact with a given investor. As long as the entrepreneur does not excessively bother the same
investor too many times, repeated contacting tends to increase the likelihood that a given investor will respond. Online platforms facilitate this frequent contacting, because the system will automatically record the contacting history. Therefore, entrepreneurs can clearly see how long they have been waiting for a response and decide when they should send a follow-up request.

Third, accompanied with increased width and frequency is decreased depth in the attempts to form initial ties online. While initial funding tie formation offline usually involves in-person meeting and in-depth conversation, online networking requires less time commitment. Also, unlike offline meetings where entrepreneurs may be under the pressure of accepting or rejecting an offer on site, online networking tends to give a longer period for responses. This reduced commitment enables entrepreneurs to freely contact a large number of investors, or “casual date” a large number of target investors (Hallen & Eisenhardt, 2012).

*Strategies to Leverage Intermediaries: Stepping-Stones versus Status-Picking*

Given the above features of online institutional intermediaries, how can entrepreneurs strategically take advantage of them? In particular, we focus on the sequence of contacting investors, and propose two types of strategies – stepping-stone strategy and status-picking strategy. A stepping-stone strategy means contacting low-rank investors to get initial replies, which could be used as stepping stones to contact higher-rank investors later on. On the contrary, a status-picking strategy starts with high-rank investors first.

The stepping-stone strategy facilitates capability building. Specifically, entrepreneurs taking the stepping-stone strategy may have a few targeted investors in mind, but instead of directly contacting these investors, entrepreneurs can first contact a large number of easily approachable investors to get their feedback on the business plans. These stepping stones serve as learning tools to bridge the gap between the unsatisfactory present and the desired future (Ott & Eisenhardt,
Also, some of these investors may express interest in investing. Entrepreneurs could leverage on these offers to negotiate with their targeted investors. In other words, these initial offers serve as proof points to catalyze subsequent tie formation (Hallen & Eisenhardt, 2012). In contrast, a stepping-stone strategy does not provide much credentials, because even if they get initial endorsement from low-status investors, that signal is not strong enough for them to be perceived as legitimate high-quality startups.

Therefore, a stepping-stone strategy fits particularly well with online institutional intermediaries, because it takes advantage of frictionless and frequent online communications to better develop entrepreneurial capabilities. First, online platforms enable entrepreneurs to identify easily approachable investors by providing the response rate of each investor. Second, online platforms facilitate entrepreneurs to quickly contact a wide range of easily approachable investors by just a few clicks. Third, since online network ties are generally weaker than offline ties, entrepreneurs are able to contact a wide range of investors without making much commitment to any of them. Overall, entrepreneurs are able to establish weak ties with easily approachable investors, which serve as stepping stones to form ties with targeted investors.

**H1. A stepping-stone strategy is positively correlated with receiving positive responses from investors.**

While stepping-stone strategies benefit online fundraising outcomes, status-picking strategies may harm online fundraising outcomes. Specifically, a status-picking strategy focuses on gaining credentials by contacting higher-rank investors. The rationale behind this strategy is that forming initial ties with high-status partners facilitates subsequent tie formation (Hallen, 2008). One reason is that affiliation with high-status investors can transfer status to the startup (Podolny, 2001; Stuart, Hoang, & Hybels, 1999). The other reason is that high-status affiliation
could resolve signal ambiguity by bringing attention to otherwise pedestrian signals (Plummer et al., 2016). In contrast, a status-picking strategy does not focus on capability building, because high-status partners may have too limited time and attention to provide any helpful feedback (Ozmel & Guler 2015; Piezunka, Katila & Eisenhardt 2015).

Therefore, a status-picking strategy does not fit well with online institutional intermediaries, because low entry barriers decrease the chance of receiving strong credentials. Specifically, the success rate of status-picking is reduced, due to reduced depth and commitment in the attempts to build initial ties. Since entrepreneurs can send their business plans to a large number of investors with just one click, investors’ inboxes tend to be filled with business plans. This influx of business plans is particularly likely for high-status investors. Thus, the likelihood of getting positive replies from investors is hugely reduced if entrepreneurs try to contact high-status investors in their initial attempts. Therefore, we propose that:

\[ H2. \text{ A status-picking strategy is negatively correlated with receiving positive responses from investors.} \]

The Effects of Strategies Moderated by Offline Institutional Development

The effects of entrepreneurial strategies online are moderated by offline institutional environment. Specifically, stepping-stone strategies are more beneficial in less developed institutions, because stepping stones are needed to overcome the hurdle of distant investment (Agrawal et al., 2015; Sorenson & Stuart, 2008). Specifically, in regions with abundant entrepreneurial resources, entrepreneurs are able to get feedback from alternative sources, and can use their social ties to build network connections with prestigious investors. Therefore, they may not need to build stepping stones by contacting lower-tier investors online. Whereas for entrepreneurs in less developed regions, it is beneficial for them to create a portfolio of interested
investors, because the initial feedback and preliminary offers serve as valuable stepping stones to attract distant investors. Therefore, we propose that:

*H3a. The effect of stepping-stone strategies is negatively moderated by offline institutional development around early-stage fundraising.*

In contrast, status-picking strategies are less penalized in more developed institutions, because geographic proximity increases the likelihood of gaining credentials (Bernstein, Giroud, & Townsend, 2015; Sorenson & Stuart, 2001, 2008). Specifically, investors are more likely to invest in local deals due to easier post-investment monitoring (Bernstein et al., 2015). Also, investors are more likely to concentrate in entrepreneurial hubs, which facilitates deal sourcing. Therefore, in regions where offline institutions around early-stage fundraising are better developed, entrepreneurs are more likely to attract high-status investors in their initial attempts. In other words, status-picking is more likely to succeed in better developed regions. Hence, we propose that:

*H3b. The effect of status-picking strategies is positively moderated by offline institutional development around early-stage fundraising.*

**Data and Measures**

To test our hypotheses, we use data from an online platform that connects entrepreneurs with investors in China. The headquarter of this platform is in Hangzhou, Zhejiang province. However, entrepreneurs and investors are geographically spread out across all major cities in China, including first-tier cities such as Beijing, Shanghai, Guangzhou and Shenzhen, as well as second-tier or third-tier cities such as Wuhan, Nanjing, and Tianjin. This platform mainly focuses on early-stage entrepreneurs, since most of the projects are in A, pre-A, or angel rounds. Accordingly, investors registered on this platform are mainly angel investors or early-stage VCs. We have the
data from the founding of the platform in January 2015 until March 2018. Until March 2018, there are 36,833 entrepreneurial projects and 3,089 investors registered on the platform.

One advantage of this dataset is that it includes detailed information on the online activities of entrepreneurs and investors. Specifically, the online activities that we are interested in are business plan submissions and investors’ replies. We have 1,417,833 times of business plan submissions in total. We are still analyzing the data at the submission level and the results will be ready by the time of the conference.

In our preliminary analysis, we focus on a subsample of projects that have detailed information on entrepreneurial education and working experience and have submitted business plans to investors at least twice. We drop the observations with only one business plan submission, because we need at least two submissions to construct the measures for stepping-stone and status-picking strategies. Specifically, we have 9,493 entrepreneurial projects with at least two batches of business plan submissions. Among these entrepreneurs, we examine 1,740 entrepreneurial projects with founders’ education and working experience. We also check that this subsample is representative of the whole population of entrepreneurs on this platform, in terms of product stage, financing stage, and time of registration.

**Dependent variables**

The dependent variable in our analysis is the number of positive responses entrepreneurs received from investors. We use text analysis to generate this variable. First, we create six categories of responses after manually reading sample responses, including: (1) meaningless responses, (2) no interest without a reason, (3) not my investment realm, (4) negative comments or critiques, (5) follow-up without asking for contact information, and (6) asking for contact information. Then, we create a list of words for each category. In the classification process, we
first classify each sentence into one category, and then classify each reply (containing multiple
sentences) by taking the highest score of the component sentences. After assigning each response
to a single category, we classify category 5 and 6 as positive, and count the number of positive
responses the entrepreneurial project receives.

To link investors’ positive responses to entrepreneurial performance, we also use two
additional dependent variables – survival and fundraising. Survival is a dummy variable that
equals 1 if the firm still exists in March 2018. We cross-checked firm survival information
provided by the platform with the firm website and two Chinese firm databases - Qichacha and
Tianyancha. Fundraising is a dummy variable that equals 1 if the firm has raised money by March
2018. We also cross-checked the self-reported funding information with data from three public
databases – Qichacha, Tianyancha, and IT Orange.

Independent variables

To measure the two strategies, we first create batches of submissions (i.e. submissions
within the same day) and compute the mean investor rank for each batch of submission. Investor
rank data is from Zero2IPO Research Institute’s annual ranking of China Venture Capital and
Private Equity in 2018. An investor’s ranking equals 1 if his/her investment institution is listed as
Top 100 in the Zero2IPO 2018 annual report. Otherwise, the investor’s ranking equals 0. For a
given batch, entrepreneurs may submit the business plan to a number of investors simultaneously.
We take the average of these investors’ ranking and use it as an indicator of investors’ average
status for a given batch. If this number is high, that indicates entrepreneurs’ intention to contact

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1 Zero2IPO research (清科研究中心) is a Chinese research institute on VC/PE investment. It publishes a ranking of
the top 100 VC investors and top 100 angel investors each year. The list of firms is on the website:
https://www.pedata.cn/RANKING/2018/web/list_unveiled.html
high-status investors for this given batch. Reversely, if this number is low, entrepreneurs may target low-status investors in the given batch of submission.

Then we fit a line of investors’ ranking for the sequential business plan submission and classify the strategies according to the slope. A positive slope represents an upward trend in targeted investors’ ranking, and a negative slope represents a downward trend in targeted investors’ ranking. Specifically, if the slope is above 0.1, we classify it as a stepping-stone strategy. If the slope is less than -0.1, we classify it as a status-picking strategy. If the slope is in between, we classify it as no pattern, which is the baseline for comparison. Accordingly, we create two variables, Stepping-Stone and Status-Picking. Stepping-Stone equals one if the slope is above 0.1 and equals zero otherwise. Status-Picking equals one if the slope is less than -0.1 and equals zero otherwise.

We check the robustness of our measure by changing the cut-off value. Specifically, we find that the results are consistent even if we increase or decrease the cut-off value by 50%. A further increase in the cut-off value does not make sense, because it would count those with clear strategic patterns as no pattern. Similarly, a further decrease in the cut-off value does not make sense either, because it would force those without a clear pattern to be either stepping-stone or status-picking.

Also, we check the robustness of our measure by using an alternative measure of the two strategies. Specifically, we count the number of ups and downs in target investor ranking in two adjacent submissions. Then we measure the strategy according to the upward-downward ratio. A strict stepping-stone strategy has a ratio of positive infinity, and a strict status-picking strategy has a ratio of zero. In our analysis, we use 2 (and 1/2) as the cut-off point. If the ratio is above 2, we classify it as a stepping-stone strategy. If the ratio is less than 0.5, we classify it as a status-picking
strategy. If the ratio is in between, we classify it as no pattern, which is the baseline for comparison.
The results using the ratio measure are consistent with the results using the slope measure.

Moderating Variable

We measure offline institutional development using the National Economic Research Institute (NERI) data. The data includes sub-indicators to rate annual marketization progress in 31 provinces, municipalities, and autonomous regions between 1997 and 2007 in China (Fan, Wang, & Zhu, 2010). NERI indexes have been widely used as a measure of institutional environment in different regions of China (Li, Meng, & Zhang, 2006; Li & Qian, 2013; Nee & Opper, 2010). In particular, we use the sub-index related to financing activities NERI_Finance, which represent the institutional environment regarding entrepreneurial fundraising. A lower value of this index means that the institutional environment is less developed.

Control Variables

We also add founder-level, project-level, platform level, and macro-economic level controls. Specifically, at the founder-level, we control for Returnee, a dummy variable indicating whether the founding team has a returnee. Also, we control for Degree, a categorical variable indicating the highest degree of the founding team members. Moreover, we control for Serial Entrepreneur, which is a dummy variable indicating whether any one of the founding team members is a serial entrepreneur. In addition, we control for Top Universities, which is a dummy variable indicating whether any one of the founding team members graduated from C9 Leagues in China. At the project-level, we control for the Amount Requested, which is a categorical variable. Also, we controlled for the fixed effect of project development Phase. At the platform level, we control for Paid User, a dummy variable indicating whether it is a paid submission. Also, we
control for the *Number of Submissions*, because a larger number of submissions is positively related with receiving a larger number of positive responses. At the macro-economic level, we control for *Year Fixed Effects* and *Industry Fixed Effects*.

**Results**

The results are provided in Table 1. We find strong support for all our hypotheses. Specifically, we use Poisson regression models since the dependent variable is a count variable. In column 1, we measure the two strategies using the slope and 0.1 (-0.1) as the cut-off value. In column 2, we check the robustness by using the slope measure and 0.05 (-0.05) as the cut-off value. In column 3, we further check the robustness by using the ratio measure. The results are consistent across these models.

In particular, we find that a stepping-stone strategy is positively correlated with the number of positive responses, which supports hypothesis 1. In column 1, the coefficient of *Stepping-Stone* is positive (b=1.517) and significant (p<0.05). In column 2, the coefficient of *Stepping-Stone* is also positive (b=0.278), although not significant even at the 0.10 level. In column 3, the coefficient of *Stepping-Stone* is also positive (b=0.660), and significant (p<0.10). Overall, the results provide relatively strong support for our first hypothesis.

Also, we find that a status-picking strategy is negatively correlated with the number of positive responses, which supports hypothesis 2. In column 1, the coefficient of *Status-Picking* is negative (b=−1.761) and significant (p<0.01). In column 2, the coefficient of *Status-Picking* is also negative (b=−1.441), and significant (p<0.01). In column 3, the coefficient of *Status-Picking* is
negative (b=-0.375) but not significant. Overall, the results provide relatively consistent support for our second hypothesis.

Moreover, we find support for the moderating effects of offline institutional development. The effect of stepping-stone strategies is negatively moderated by offline institutional development around early-stage fundraising, which supports hypothesis 3a. In column 1, the coefficient of the interaction term *NERI_Finance x Stepping-Stone* is negative (b=-0.233) and significant (p<0.05). This coefficient means that as the offline fundraising institutions become better developed, the positive effect of stepping-stone strategy is reduced. In column 2, the coefficient of the interaction term *NERI_Finance x Stepping-Stone* is negative (b=-0.046) but not significant, which is consistent with the insignificant main effect on stepping-stone. In column 3, the coefficient of the interaction term *NERI_Finance x Stepping-Stone* is negative (b=-0.119) and significant (p<0.10). Overall, the results support our hypothesis 3a.

Similarly, the effect of status-picking strategies is positively moderated by offline institutional development around early-stage fundraising, which supports hypothesis 3b. In column 1, the coefficient of the interaction term *NERI_Finance x Status-Picking* is positive (b=0.215) and significant (p<0.01). This coefficient means that as the offline fundraising institutions become better developed, the negative effect of status-picking strategy is reduced. In column 2, the coefficient of the interaction term *NERI_Finance x Status-Picking* is positive (b=0.169) and significant (p<0.01). In column 3, the coefficient of the interaction term *NERI_Finance x Status-Picking* is positive (b=0.051) but insignificant, which is consistent with the insignificant main effect on status-picking. Overall, the results provide support for our hypothesis 3b.

To further draw implications on entrepreneurial performance, we run logit regressions on survival and fundraising using investors’ positive responses as the independent variable. The
results are shown in Table 2 and Table 3. In Model 1, we code up positive responses received from all investors as 1. In Model 2, we only count positive responses from top investment firms as 1. Top investment firms are defined as the top 100 investment firms listed in Zero2IPO Research Institute’s annual ranking of China Venture Capital and Private Equity in 2018. In Model 3, we further narrow our definition of top investors to high-level investors within top investment firms. High-level investor positions include Partner, VP, and MD in VC firms and angel investors, because they have the decision making right.

The result shows that receiving positive responses from investors is predictive of firm survival and fundraising outcomes. Specifically, Table 2 shows that receiving positive responses from all investors (b=0.106, p<0.01), from top investment firms (b=0.429, p<0.01), and from top investors within top investment firms (b=0.371, p<0.10) are all positively associated with firm survival. Similarly, Table 3 shows that receiving positive responses from top investment firms is positively associated with the likelihood of fundraising (b=0.309, p<0.10). Receiving positive responses from all investors (b=0.0413) and receiving from top investors within top firms (b=0.457) are also positively related to fundraising, although the coefficients are not statistically significant.

Discussions and Conclusions

To conclude, this paper finds that the effects of institutional intermediaries on entrepreneurial outcomes depend on how entrepreneurs strategically leverage the intermediaries. Specifically, we find that a stepping-stone strategy is positively correlated with online fundraising
outcomes, whereas a status-picking strategy is negatively correlated with online fundraising outcomes. Moreover, we find that stepping-stone strategies are more beneficial in less developed regions, whereas status-picking strategies are less penalized in more developed regions.

This paper contributes to prior work at the intersection of institutional intermediaries, platforms, and network tie formation. First, while prior research focuses on how institutional intermediaries help entrepreneurs, this paper explores how entrepreneurs strategically leverage intermediaries. Specifically, research on institutional intermediaries addresses gaps in capital markets, regulations, and other institutions that facilitate market exchange (Eberhart et al., 2017; Khanna & Palepu, 1997). In particular, a lack of early-stage entrepreneurial funding is common in many emerging economies relying on public-sector resources (Armanios et al., 2016; Dinç, 2005; George & Prabhu, 2000). To resolve this problem, prior research finds that institutional intermediaries help entrepreneurs get access to venture funding and promote venture growth (Armanios et al., 2016; Dutta & Folta, 2016). However, prior work takes a largely deterministic view about the effects of institutional intermediaries on entrepreneurs while neglecting the strategic actions of entrepreneurs. Adding to this stream of literature, we investigate how the impact of institutional intermediaries may differ with different entrepreneurial strategies to leverage the intermediaries. Specifically, we propose that online fundraising platforms serve as a new type of institutional intermediary. Moreover, we further investigate how entrepreneurs can use two types of strategies to leverage online institutional intermediaries. This conceptualization is related to our second contribution to the platform literature.

Second, platforms have been studied a lot by economists, but we lack a conceptualization of platforms from the organizational theory perspective. Relatedly, prior platform research focuses on the strategy of platform providers (Eisenmann et al., 2006; Rochet & Tirole, 2003), but the
strategy of platform users is largely unexplored. We address the above two gaps by conceptualizing platforms as a type of institutional intermediaries and investigating how entrepreneurs as platform users can strategically leverage the platform to form ties with investors. Specifically, intermediaries link together two or more parties to enable certain activities that would not readily occur otherwise. Prior research investigates different types of institutional intermediaries, such as science parks (Armanios et al., 2016; Dutta & Folta, 2016) and accelerators (Gonzalez-Uribe & Leatherbee, 2016), that link entrepreneurs with government funds. However, these types of intermediaries tend to provide geographically restricted linkage between entrepreneurs and the local government. To address this problem, we propose that online platforms serve as online institutional intermediaries that connect entrepreneurs with investors across regions. Therefore, online intermediaries enable entrepreneurs to form ties with a large number of investors that they otherwise cannot get access to. This insight links to our third contribution to network tie formation literature.

Third, this paper contributes to network tie formation literature by investigating sequential attempts for initial tie formation and discussing initial tie formation online versus offline. Specifically, prior research on network tie formation mainly discusses two ways to form new funding ties. The first way is to leverage previous network connections. For example, serial entrepreneurs may rely on their pre-established network connections to raise capital for the new startups (Hallen, 2008). Also, after raising the first round of funding, entrepreneurs’ subsequent funding tie formation tends to be influenced by their previous investors’ network connections (Hallen, Katila, & Rosenberger, 2014). However, not all entrepreneurs have pre-established network connections with investors. In this case, the second way entrepreneurs can use is to rely on a set of catalyzing strategies to shape tie formation opportunities (Hallen & Eisenhardt, 2012).
Although catalyzing strategies could effectively build initial network connections, it may take a relatively long time to repeatedly date a few investors and to wait until proof points. To increase the efficiency of tie formation, this paper proposes that entrepreneurs could use a stepping-stone strategy, which is facilitated by online platforms because entrepreneurs are able to form weak ties with easily approachable investors without spending much time or making much commitment. In contrast, status-picking may not be a proper strategy to approach investors online.

To sum up, this paper contributes to prior work at the intersection of institutional intermediaries, initial tie formation, and platform-based strategies. However, our study has several limitations that may provide promising avenues for future research. First, while we focus on the sequence of tie formation, future work may investigate other dimensions of networking strategies that entrepreneurs may use on the platforms. Second, while we use investors’ responses as the dependent variable, future work may explore other types of entrepreneurial outcomes such as revenue, profits, and growth. Third, while we mainly investigate online institutional intermediaries, future work may further compare online versus offline institutional intermediaries and examine how entrepreneurs may simultaneously leverage both online and offline intermediaries to build network connections. Overall, future work may be fruitful exploring related questions at the nexus of institutional theory, network theory, and digital platforms.

Reference:

Management Journal.


Table 1. Poisson Regressions: The Effects of Stepping-Stone and Status-Picking Strategies

<table>
<thead>
<tr>
<th></th>
<th>Number of Positive Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Slope (0.1)</td>
</tr>
<tr>
<td>Stepping-Stone</td>
<td>1.517** (0.749)</td>
</tr>
<tr>
<td>Status-Picking</td>
<td>-1.761*** (0.507)</td>
</tr>
<tr>
<td>NERI_Finance</td>
<td>0.038 (0.025)</td>
</tr>
<tr>
<td>NERI_Finance x Stepping-Stone</td>
<td>-0.233** (0.101)</td>
</tr>
<tr>
<td>NERI_Finance x Status-Picking</td>
<td>0.215*** (0.069)</td>
</tr>
<tr>
<td>Number of Submissions</td>
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<td>Paid User</td>
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</tr>
<tr>
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<td>0.049 (0.104)</td>
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<tr>
<td>Industry Fixed Effect</td>
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<tr>
<td>Phase Fixed Effect</td>
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</tr>
<tr>
<td>Observations</td>
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<tr>
<td>Log Likelihood</td>
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Note: *p<0.10, **p<0.05, ***p<0.01; Standard Errors in Parentheses
Table 2. Logit Regressions: Predicting Survival by Responses Received

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Positive Responses from All Investors</th>
<th>Model 2 Positive Responses from Top Investment Firms</th>
<th>Model 3 Positive Responses from Top Investors in Top Investment Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Responses</td>
<td>0.106***</td>
<td>0.429***</td>
<td>0.371*</td>
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<tr>
<td></td>
<td>(0.0251)</td>
<td>(0.128)</td>
<td>(0.222)</td>
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<tr>
<td>NERI Finance</td>
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<td>-0.0162</td>
<td>-0.0155</td>
</tr>
<tr>
<td></td>
<td>(0.0298)</td>
<td>(0.0297)</td>
<td>(0.0296)</td>
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<tr>
<td>Top Universities</td>
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<td>-0.150</td>
<td>-0.147</td>
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<tr>
<td></td>
<td>(0.152)</td>
<td>(0.152)</td>
<td>(0.151)</td>
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<tr>
<td>Serial</td>
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<td>0.346***</td>
<td>0.349***</td>
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<tr>
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<td>(0.100)</td>
<td>(0.100)</td>
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<td>-0.0298</td>
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<td>(0.0455)</td>
<td>(0.0455)</td>
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<td>0.128</td>
<td>0.130</td>
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<tr>
<td></td>
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<td>(0.0841)</td>
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<tr>
<td>Phase Fixed Effect</td>
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</tbody>
</table>

Note: *p<0.10, **p<0.05, ***p<0.01; Standard Errors in Parentheses
Table 3. Logit Regressions: Predicting Fundraising by Responses Received

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Responses from All Investors</td>
<td>Positive Responses from Top Investment Firms</td>
<td>Positive Responses from Top Investors in Top Investment Firms</td>
</tr>
<tr>
<td>Positive Responses</td>
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<td>0.309*</td>
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<tr>
<td>(0.0383)</td>
<td>(0.174)</td>
<td>(0.316)</td>
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<tr>
<td>NERI Finance</td>
<td>0.0326</td>
<td>0.0331</td>
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<tr>
<td>(0.0522)</td>
<td>(0.0523)</td>
<td>(0.0522)</td>
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<tr>
<td>Top University</td>
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<td>(0.230)</td>
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<td>(0.176)</td>
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<td>Amount Requested</td>
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Note: *p<0.10, **p<0.05, ***p<0.01