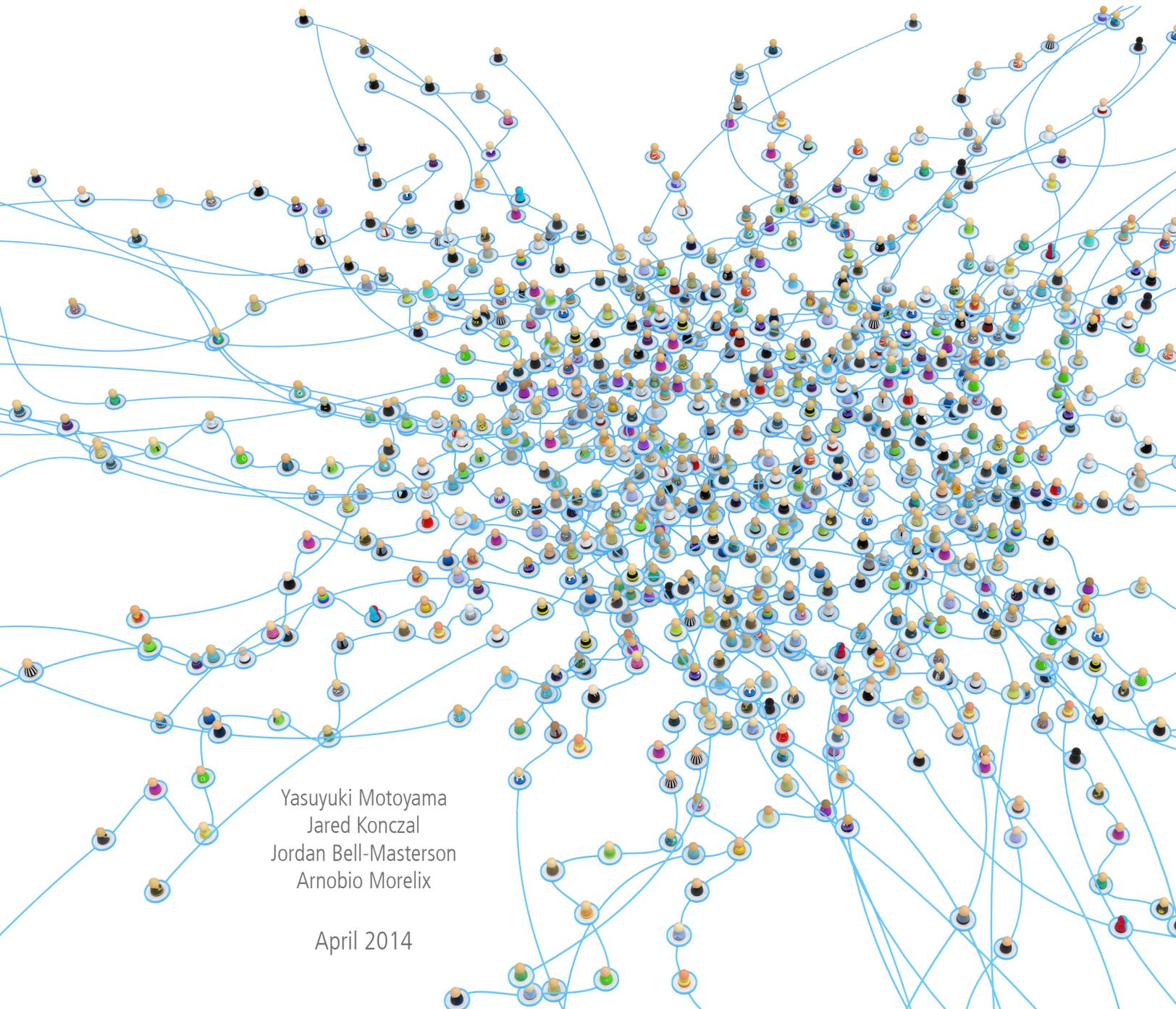


# Think Locally, Act Locally:

## Building a Robust Entrepreneurial Ecosystem



Yasuyuki Motoyama  
Jared Konczal  
Jordan Bell-Masterson  
Arnobio Morelix

April 2014



# Think Locally, Act Locally:

Building a Robust  
Entrepreneurial Ecosystem

April 2014

Yasuyuki Motoyama  
Jared Konczal  
Jordan Bell-Masterson  
Arnobio Morelix

Ewing Marion  
**KAUFFMAN**  
Foundation

The authors would like to thank Dane Stangler, Barbara Pruitt, Lacey Graverson, Melody Dellinger, and Michelle St. Clair.



# Executive Summary

This report analyzes behavioral patterns of entrepreneurs who participate in 1 Million Cups® (1MC) Kansas City, a Kauffman Labs for Enterprise Creation program designed to engage, educate, and connect entrepreneurs. We published our first paper about 1MC in March 2013, which presented results of an initial survey among 1MC participants to identify their demographic characteristics, information about whether they were a founder or co-founder of a startup, and their attendance patterns at 1MC. This second paper is based primarily on another round of surveys we conducted in May 2013 and January 2014. This time, we deepen our analysis particularly on local networking activities, such as entrepreneurs' connections to other local programs and information collection via Twitter activities.

## Key findings include:

- **Entrepreneurs follow local entrepreneurs.** While the most popular Twitter accounts in the United States belong to celebrities, entrepreneurs are studious by primarily following entrepreneurship-focused accounts, such as those by other entrepreneurs, entrepreneurial programs, and individuals affiliated with local entrepreneurship support organizations.
- **Entrepreneurship is a local phenomenon.** The most influential Twitter feeds among the entrepreneurs surveyed are primarily local.
- **Local network thickens over time.** The network of 1MC participants gets considerably more connected over the eight months of our analysis.
- **Different programs reach different entrepreneurs.** While the attendance of 1MC in Kansas City—more than 250 weekly—is by no means small, we observe heterogeneity within the local entrepreneurial ecosystem. We found a considerable overlap between 1MC and Startup Weekend attendees, as well as a strong connection between Kauffman FastTrac® and KCSourcelink® participants/users; however, there is little overlap between 1MC and FastTrac, and no evidence of a single “catch-all” program. One interpretation of these results is that

different types of entrepreneurs use different types of programs to meet their needs.

- **Entrepreneurial demand is high for peer-based learning and networking.** The fast growth experienced by the 1MC program, from Kansas City to the soon-to-be thirty-five other cities across the country, suggests that there is a demand from entrepreneurs for opportunities to learn from and connect with their local peers.

## Implications:

- **Think local.** Policymakers, entrepreneurship supporters, and entrepreneurs themselves should keep in mind the locally structured nature of entrepreneurial networks. Thus, it will be most effective to communicate with entrepreneurs within a local sphere.
- **One size does not fit all.** A single popular entrepreneurship program does not necessarily reach many types of entrepreneurs, and entrepreneurs seek out and build a diverse array of networks. When creating or promoting new entrepreneurship programs, policymakers and entrepreneurship-supporters should consider what types of entrepreneurs are already served by current existing programs and what types of entrepreneurs still are underserved.



# Introduction

The book *Startup Communities*, by entrepreneur and investor Brad Feld, has become a well-referenced resource for people around the world seeking to build and foster vibrant entrepreneurial ecosystems in their communities.<sup>1</sup> In his book, Feld provides four postulates—which form the “Boulder Thesis”<sup>2</sup>—to guide entrepreneurial communities:

- 1) Entrepreneurs must lead the entrepreneurial community, not professors, policymakers, or agency administrators.
- 2) The community must have a porous boundary by including the entire stack of entrepreneurs, from experienced serial entrepreneurs, to nascent entrepreneurs, to individuals thinking about startup companies.
- 3) The community must have organized activities that engage people in the entrepreneurial context. Cocktail parties and networking receptions will not build a vibrant entrepreneurial community.
- 4) Community leaders must commit for the long term, at least twenty years.

Entrepreneurs and community leaders everywhere have embraced these ideas. Building evidentiary support for them, however, is not easy.

In the same vein as Feld, the Kauffman Foundation created 1 Million Cups (1MC), a weekly program designed to engage and educate entrepreneurs in Kansas City. Incidentally, 1MC shares most of Feld’s postulates: 1) led by entrepreneurs, 2) includes various kinds of people involved in entrepreneurship (see more details following), and 3) a regular, organized, (non-party) activity that includes a short presentation followed by a longer Q&A session to engage the audience and to discuss real issues and potential solutions. Necessarily, the notion of a long-term commitment can only be tested over time.

In this paper, we use our 1MC program to explore Feld’s postulates. Our intention is not to test if each or all of Feld’s postulates are right; in contrast, our aim is to observe the patterns of connections among entrepreneurs that lay underneath those postulates. Our surveys of 1MC participants allow us to analyze the behavior of entrepreneurs. We combine these with

surveys conducted by other Kauffman-affiliated programs and by following Twitter handles of 1MC participants.

1MC started in April 2012 in Kansas City, Missouri, with only about a dozen participants. The number of participants increased steadily, reaching 100 in September 2012 and 200 in January 2013. Since our initial survey in November 2012, 1MC has expanded to thirty-four cities nationwide.<sup>3</sup> Moreover, the organization and administration of 1MC is purely voluntary. This is not a grant program in which the Kauffman Foundation appoints the operating people or directs grantees by providing financial assistance; instead, local volunteers, often entrepreneurs themselves, approach the Kauffman Foundation about the organization. This level of rapid expansion and high attendance in each city demonstrates a significant desire on behalf of participants to learn from other entrepreneurs and get connected in each city.

We first conducted a survey of 1MC Kansas City participants in November 2012 and published our first report in March 2013: “Energizing an Ecosystem: Brewing 1 Million Cups<sup>4</sup>.” In this initial report, we primarily focused on demographic and descriptive information of 1MC participants. For instance, first, we found 1MC engaged the entire stack of entrepreneurs by connecting early-stage entrepreneurs (47 percent) and mid-stage entrepreneurs (20 percent) in terms of their revenue intake, as well as going-to-be entrepreneurs (33 percent). (Notice: this is Feld’s second postulate.) It also brought together a good mix of entrepreneurs, designers, engineers, marketers, and people with other areas of expertise.

In addition, the survey revealed some counter-intuitive findings. Despite the ubiquitous use of technology for communication purposes, word of mouth played a crucial role to recruit participants. More than two-thirds (67 percent) indicated they heard about 1MC firsthand, while only a few reported learning about the program via websites or Twitter. This word-of-mouth expansion was very even as well, with many different individuals spreading the word, rather than one single person being responsible for the growth.

Despite the common impression that Kansas City lacks talent because it loses people to other regions, the survey pointed out that Kansas City enjoys a healthy number of entrepreneurs for its size. Indeed, from 1990 to 2010, the Kansas City metro area enjoyed one of the largest increases in tech startup density in

1. Feld 2012.

2. By many indicators, Boulder is one of the most entrepreneurial cities in the nation. See our past reports for startup rates (Stangler 2013; Hathaway 2013) and for high-growth Inc. firms (Motoyama and Danley 2012).

3. With the additions of Little Rock and Nashville on April 16, 2014, the total will be thirty-six cities. More information available at: <http://www.1millioncups.com/>.

4. Available online at: <http://www.kauffman.org/what-we-do/research/2013/03/energizing-an-ecosystem-brewing-1-million-cups>.

the country.<sup>5</sup> Finally, Kansas City natives comprised nearly half of participants, and the remainder consisted of people from outside Kansas City who moved to the area to attend local universities or because of job placement.

This subsequent 1MC report combines results from our past two surveys: the first in November 2012 and the second in May 2013, both conducted at 1MC Kansas City. While the primary objective of this report is exploratory and descriptive, we focus on the following four dimensions.

- 1) Who do the tech-savvy entrepreneurs follow on Twitter? Entrepreneurial or celebrity accounts? Local or national figures?
- 2) Do 1MC participants follow each other on Twitter, or does 1MC have an effect of making such following patterns denser?
- 3) What is the local network pattern of 1MC participants by stages of entrepreneurship? Do entrepreneurs in more advanced stages participate in more networks?
- 4) What kind of entrepreneurs does 1MC attract compared to other local entrepreneurial programs, such as Kauffman FastTrac?

Additionally, we examine each area to see if it fits with one of Feld’s four postulates, and if so, how. We believe that findings from this report will deepen understandings of networking and other patterns of entrepreneurs, and provide implications for researchers, 1MC organizers and participants, and other entrepreneurship support organizations. We also hope that it will provide information useful to other communities looking to build and foster an entrepreneurial ecosystem.

## 1. Entrepreneurs’ Popular Twitter Accounts

Who do entrepreneurs follow on Twitter?<sup>6</sup> Many of the 1MC participants in Kansas City are in the information technology sector, and with that, we expect that they are tech-savvy and

active in the digital space, including in the way they behave as entrepreneurs. For example, in the ways they locate information and their networking patterns. Indeed, of 132 survey respondents in our May 2013 survey, we recorded Twitter handles for 74 people (56 percent), on which our analysis in this paper is based. We present findings from two point-in-time scrapes of the Twitter API, one in May 2013 and a follow-up in January 2014, to analyze comparisons and consistency.

By way of comparison, the most popular general Twitter feeds<sup>7</sup> are overwhelmingly owned by celebrities, such as Katy Perry (more than 51 million followers), Justin Bieber (50 million), and Lady Gaga (41 million). Barack Obama ranks third with 42 million followers and is the only politician in the top 50. As the top traditional entrepreneur, Bill Gates ranks 37th overall with 15 million followers. It will not be a surprise, then, that 10 percent to 16 percent of entrepreneurs follow celebrities, even among our 1MC participants.

The survey results regarding use of Twitter produced some unexpected results. To start with, the possession of a Twitter handle among 1MC participants does not correlate with their age as we might expect. Of the younger generation (18–24 years), 67 percent have a Twitter handle, but the ratio increases somewhat to 77 percent and 83 percent for age groups 25–34 and 35–44, respectively. Rather surprisingly, 77 percent of the 55–64 age group also has a Twitter account. In short, we should not assume that all Twitter behavior is by the younger generation of 1MC participants, which seems to indicate that, pursuant to Feld’s thesis, 1MC engages a large swathe of the entrepreneurial stack.

Table 1. Possession of Twitter Handles by Age Group<sup>8</sup>

Age Range	Yes	No	Sub-Total	% Yes
17 or younger		1	1	0%
18–24	6	3	9	67%
25–34	23	7	30	77%
35–44	24	5	29	83%
45–54	13	7	20	65%
55–64	10	3	13	77%
65 or older				N/A
<b>Sub-Total</b>	<b>76</b>	<b>26</b>	<b>102</b>	<b>75%</b>

Source: Ewing Marion Kauffman Foundation

5. Stangler (2013).

6. For the purpose of this study, Twitter feeds, profiles, handles, and accounts all refer to the same thing.

7. <http://twittercounter.com/pages/100> (as of the publication of this report).

8. The numbers on this cross-tabulation do not necessarily match the general total we described in the previous paragraph because, for instance, there are two people who indicated the possession of Twitter accounts, but did not reveal their specific handles. Additionally, there are people who did not answer the age question, which excluded them from this table.

The conventional wisdom suggests that, as citizens of an increasingly flat world, entrepreneurs would follow feeds and insights from national and even global figures. Twitter certainly makes this possible, as you can easily follow anyone from anywhere. The popular media oriented to entrepreneurship seems to reinforce this, including *10 Essential Entrepreneurs to Follow on Twitter*<sup>9</sup> and *25 Twitter Chats Every Entrepreneur Must Know*.<sup>10</sup> Thus, our first hypothesis is that entrepreneurs follow nationally known figures.

At the same time, past academic studies suggest that entrepreneurship is mostly a local phenomenon.<sup>11</sup> Startup rates vary distinctly by regions,<sup>12</sup> and it is widely known that Silicon Valley possesses a unique culture, assets, and networks of entrepreneurs and other economic entities, by way of example. This provides a counter-hypothesis that entrepreneurs in Kansas City may track more local sources of information via Twitter than national or global sources.

The 74 Twitter account holders in our survey followed a total of 18,929 and 22,339 Twitter feeds in May 2013 and January 2014, respectively. Analyzing all these feeds would not only be onerous, but also violates the confidentiality of each survey respondent. Thus, in this report, we focus on the “most popular” profiles; those with at least 10 followers from among our 74 surveyed entrepreneurs. We identified 178 Twitter feeds that fit this profile; approximately 9 percent of the entire number of feeds (again, 18,929 and 22,239 feeds in the two periods).

At first glance, none of the celebrities makes it to the top list for our participants,<sup>13</sup> and results indicate that entrepreneurs in Kansas City are studious in following entrepreneurship-oriented feeds, such as Silicon Prairie News, Launch KC, KCSOURCELINK, and Kauffman Foundation-related accounts.

Table 2. Nineteen Most-Followed Twitter Feeds by 1MC Participants with Twitter Handles

No.	Feeds	Followers
1	1millioncups <sup>14</sup>	50
2	Kauffman Foundation	41
3	Silicon Prairie News	39
4	Launch KC	36
5	KCSOURCELINK	35
6	Kauffman Labs	32
6	KC Startup Village	32
8	Mayor Sly James <sup>15</sup>	30
9	Cameron Cushman <sup>16</sup>	28
10	KCnext	27
11	Prentiss Earl III <sup>17</sup>	26
11	Local Ruckus <sup>18</sup>	26
13	KC Business Journal	25
13	Kansas City	25
15	Big Kansas City	23
15	Adam Arredondo <sup>19</sup>	23
17	Nate Olson <sup>20</sup>	22
17	Kansas City Star	22
17	Ryan Weber <sup>21</sup>	22

Source: Ewing Marion Kauffman Foundation

9. <http://mashable.com/2009/10/29/entrepreneurs-Twitter-follow/>.

10. <http://under30ceo.com/25-twitter-chats-every-entrepreneur-must-know/>.

11. (Feldman 2003; Malecki 2007; Acs and Armington 2006).

12. (Stangler 2013; Hathaway 2013; Konczal 2013).

13. With exception of Barack Obama (fifteen to eighteen followers in the two survey periods), only zero to three 1MC participants followed the seven celebrities of the top ten most followed Twitter accounts in the nation.

14. Originally specific to 1MC Kansas City; this handle became the parent 1MC account in September 2013. 1millioncupsKC then became the local account. Even with that, the 1 Million Cups “headquarters” (so to speak), is still in Kansas City.

15. Mayor of Kansas City, Missouri.

16. Kauffman Foundation/1 Million Cups co-founder.

17. Kauffman Foundation.

18. 1 Million Cups participant; Adam Arredondo’s company (see next footnote).

19. Co-leader of Kansas City’s Startup Village; co-founder of 1 Million Cups companies Local Ruckus and Hoopla.io.

20. Kauffman Foundation/1 Million Cups co-founder.

21. President of KCnext.

We then classify the Twitter profiles by geography and type. For geographical categories, we chose to divide the most followed Twitter profiles between “local” and “national.” The “local” designation includes Twitter accounts either based in Kansas City or with a local or regional sphere of influence.<sup>22</sup> Conversely, the “national” category is comprised of Twitter accounts not based in Kansas City that have a national or international sphere of influence.<sup>23</sup>

In Table 3, the most popular Twitter feeds are overwhelmingly local, comprising 84.3 percent in May 2013 and growing slightly to 86.2 percent in January 2014. On average, each local feed had more followers, suggesting the locals are more influential within our sample than the national accounts in terms of both extensiveness and intensity.

Table 3. Geographic Distribution of Most-Followed Twitter Feeds

	May 2013			January 2014		
	Count	Percentage	Average Followers	Count	Percentage	Average Followers
Local	150	84.3%	15.5	200	86.2%	15.7
National	28	15.7%	11.6	32	13.8%	12.8
<b>Total</b>	<b>178</b>	<b>100.0%</b>	<b>14.9</b>	<b>232</b>	<b>100.0%</b>	<b>15.3</b>

Source: Ewing Marion Kauffman Foundation

Additionally, we created the following typology for the types of feeds:

- *Entrepreneur*, which refers to founders, co-founders, and business executives;
- *Company*, which includes both established companies and startups;
- *Media*, including media organizations, entrepreneurship-related media, and media individuals, such as reporters;
- *Entrepreneurship Support Program*, which includes organizations such as accelerators, chambers of

commerce, tech-related conferences, and non-profits that support entrepreneurs;

- *Other Non-profits and Government*, including service organizations, government agencies, and non-profits not associated to entrepreneurship;
- *Politician*, which comprises local and national individuals in public service; and
- *Kauffman Foundation Employee*, which includes professionals working for the Kauffman Foundation in 2013 and 2014.

Among the categories of Entrepreneur, Company, Entrepreneurship Support Program, and Kauffman Foundation Employee, which account for two-thirds of the most-followed feeds, there is a strikingly evident difference between the local and national feeds. Even with Media, often dominated by national stations, the 1MC Kansas City participants follow more local Twitter feeds than national. The only exception to this trend is the category of national companies in January 2014.<sup>24</sup>

The overall distribution of “most popular” profiles remains generally unchanged from May 2013 to January 2014. Although there is a minor difference, we observe more local feeds in most categories for January 2014, which reinforces our findings thus far, suggesting that this local orientation does not change over time, at least in this time period.

### Local influence of Twitter feeds of national scope

We now turn to analyze where those national “must follow” entrepreneurship-related accounts stand among our 1MC participants. We have searched such “must follow” articles for entrepreneurs on the Internet in 2013 and compiled more than 100 Twitter accounts published in the following five popular media outlets:

- Mashable, *10 Essential Entrepreneurs to Follow on Twitter*<sup>25</sup>
- Huffington Post, *The 8 Best Entrepreneurs To Follow On Twitter*<sup>26</sup>
- TNW (The Next Web), *The 25 Most Influential People Tweeting About Entrepreneurship*<sup>27</sup>

22. Among the “Local” accounts, only four were not based in Kansas City in a strict sense. These Twitter profiles were based in neighboring states in the Midwest and consisted of individuals and organizations with strong presences in Kansas City. While we considered a “Regional” category, four feeds were not enough to justify a separate classification, and we chose to add these profiles to the “Local” category.

23. The only two Twitter accounts among our “most-followed” feeds not based in the United States were the “Dalai Lama” and “The Economist.”

24. In this case, the two companies with relatively large following are Google Fiber (@googlefiber) and HootSuite (@hootsuite). Arguably, Google Fiber has a very strong local presence given that Kansas City is the first city where Google’s ultra-high-speed Fiber Internet service became available.

25. <http://mashable.com/2009/10/29/entrepreneurs-Twitter-follow/>.

26. [http://www.huffingtonpost.com/scott-gerber/the-8-best-entrepreneurs-\\_b\\_912809.html#s317924title=Gary\\_Vaynerchuck](http://www.huffingtonpost.com/scott-gerber/the-8-best-entrepreneurs-_b_912809.html#s317924title=Gary_Vaynerchuck).

27. <http://thenextweb.com/socialmedia/2011/04/21/the-25-most-influential-people-tweeting-about-entrepreneurship/>.

Table 4. Typological Distribution of Most-Followed Twitter Feeds

	May 2013			January 2014		
	Count	Percentage	Average Followers	Count	Percentage	Average Followers
<b>Entrepreneur</b>	<b>46</b>	<b>25.8%</b>	<b>13.2</b>	<b>62</b>	<b>26.7%</b>	<b>13.8</b>
Local	40	87.0%	13.4	57	91.9%	13.9
National	6	13.0%	11.3	5	8.1%	13.0
<b>Company</b>	<b>42</b>	<b>23.6%</b>	<b>13.5</b>	<b>46</b>	<b>19.8%</b>	<b>14.2</b>
Local	39	92.9%	13.5	44	95.7%	14.0
National	3	7.1%	13.0	2	4.3%	18.5
<b>Media</b>	<b>30</b>	<b>16.9%</b>	<b>13.4</b>	<b>49</b>	<b>21.1%</b>	<b>13.8</b>
Local	16	53.3%	15.3	30	61.2%	15.0
National	14	46.7%	11.2	19	38.8%	12.0
<b>Entrepreneurship Support Program</b>	<b>28</b>	<b>15.7%</b>	<b>19.9</b>	<b>34</b>	<b>14.7%</b>	<b>20.1</b>
Local	25	89.3%	20.9	31	91.2%	20.8
National	3	10.7%	11.7	3	8.8%	12.7
<b>Other Non-Profit and Government</b>	<b>21</b>	<b>11.8%</b>	<b>14.8</b>	<b>27</b>	<b>11.6%</b>	<b>15.8</b>
Local	21	100.0%	14.8	26	96.3%	16.0
National	0	0.0%	0.0	1	3.7%	11.0
<b>Politician</b>	<b>3</b>	<b>1.7%</b>	<b>19.0</b>	<b>5</b>	<b>2.2%</b>	<b>16.8</b>
Local	1	33.3%	30.0	3	60.0%	18.0
National	2	66.7%	13.5	2	40.0%	15.0
<b>KF Employee</b>	<b>8</b>	<b>4.5%</b>	<b>18.4</b>	<b>9</b>	<b>3.9%</b>	<b>18.7</b>
Local	8	100.0%	18.4	9	100.0%	18.7
<b>Total</b>	<b>178</b>	<b>100.0%</b>	<b>14.9</b>	<b>232</b>	<b>100.0%</b>	<b>15.3</b>

Source: Ewing Marion Kauffman Foundation

- Nibletz, *Follow Friday: 50 Startup Related Twitter Accounts To Follow Everywhere Else*<sup>28</sup>
- Under30CEO, *25 Twitter Chats Every Entrepreneur Must Know*<sup>29</sup>

It turns out that only the following four handles from all of the above lists were on our most-popular Twitter feeds list, with ten or more followers among 1MC Kansas City participants:

- Kauffman Foundation (41 followers in May 2013; 40 in January 2014)
- Brad Feld (13 followers in May 2013; 16 in January 2014)
- Startup Weekend (11 followers in May 2013; 13 in January 2014)
- Mark Cuban (11 followers in May 2013; 12 in January 2014)

Interestingly, of these four, three have strong local ties. The Kauffman Foundation is headquartered in Kansas City; Brad Feld owns a house in the Kansas City Startup Village; and Startup Weekend regularly hosts events in Kansas City. This finding suggests that even among the profiles with a national sphere of influence, entrepreneurs follow mostly locally relevant feeds.

In sum, the most-followed profiles are overwhelmingly local. From a policy perspective, these findings suggest that attempts to communicate and connect with entrepreneurial communities would be most effective at the local level. Feeds with a national scope have limited popularity and influence among entrepreneurs. This analysis supports the locally structured nature of entrepreneurship, and such geographic scale should be kept in mind when evaluating the effectiveness of any form of communication with entrepreneurs. We will be testing this conclusion through 1MC surveys in other cities.

## 2. Thickening Network?

In this section, we analyze the Twitter following patterns of 1MC participants among themselves. Do 1MC participants follow each other? Does attending 1MC over time have an effect on thickening such a following pattern? Is there any pattern as far as who garners the most additional followers from among this set of respondents?<sup>30</sup>

We again use our May 2013 survey with 74 Twitter handles, with two point-in-time scrapes of the Twitter API, one in May 2013, and one in January 2014. A quick note: For expediency in the rest of this section, and in this section alone, we will refer to “followers from among the set of respondents” as simply “followers.”

Bottom line, we find a highly skewed pattern of Twitter following activity among the 74 participants: 35 (47 percent) had 0 followers in May. Of 39 people who had followers, 19 had 1–2 followers, 7 had 3–5 followers, 9 had 6–9 followers, and 4 had 10 or more followers. (see Figure 1).

Such a skewed pattern is still present in January 2014, but we observe more thickening patterns in following within 1MC participants. While the changes from 0 followers (35 in May to 33 in January) and 6–9 followers (9 to 8) may seem small, the increases in 10–14 followers (4 to 7) and 15–18 followers (0 to 3) are notable. In other words, there was an emergence of

entrepreneurial leaders (i.e., account owners with more followers) after eight months.

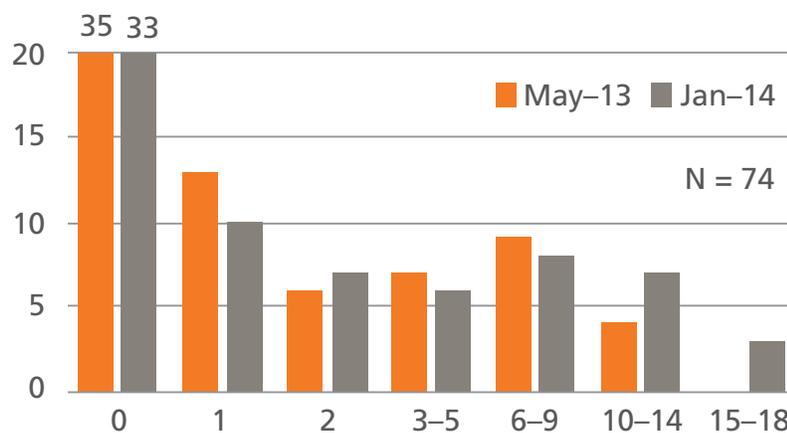
This leads us to our next question: What kind of people gained followers between the two periods? For this analysis, we cross-tabulate the sample into several different groups to see if a particular group has higher association with those emerging leaders. We examine by 1) founders vs. non-founders, 2) founders by stages of business (in development, undergoing a major modification, solid, or self-sustaining), and 3) whether they were presenters at 1MC.

We abbreviate our detailed results here, but none of the three hypothesized groups had any association with the emerging entrepreneurial leaders. As all of them are rejected, we cannot tell what kind of people gain followers, and further research is needed.

In sum, the most notable finding in this section is that the network thickened considerably after eight months; however, this growth did not happen evenly, with everyone starting to follow each other. Instead, it took place in such way that several leaders emerged by having 20 percent to 25 percent of followers among the sampled Twitter group.

We venture that the network likely does not grow by chance, and these 1MC participants are probably more subject to repeated interaction with each other over our eight-month timeframe than strangers would be. We cautiously note that we do not argue the

Figure 1. The Number of Followers Within 1MC Participants, May vs. January



Source: Ewing Marion Kauffman Foundation

30. Another interesting question to track over time is whether there is a “1MC bump”: Do presenters become larger network nodes with more followers after their 1MC presentation?

causality that 1MC (and 1MC solely) has increased the density of connections. We can just as easily imagine a scenario in which 1MC participants also frequently participate in other tech-scene programs (such as Startup Weekend, as we see in Section 4), and those other programs (or the combination of several or all of them) might facilitate this increase in Twitter network density. Nonetheless, we can conclude that the participation in 1MC does correlate with the thickening effect of the local network. At the same time, we need to conduct further research to determine what kind of people receive more network following (as not everyone is followed more) and why.

We hypothesize that this further research will demonstrate that these leaders fall into either the Entrepreneur or Company categories, probably mostly on the local side, which would again reinforce one of Feld’s four postulates—the first—that entrepreneurs are and must be the ones leading the entrepreneurial community. Of the four most-followed Twitter handles listed above (Kauffman Foundation, Brad Feld, Startup Weekend, and Mark Cuban), three out of the four fit this profile, with only the Kauffman Foundation not being directly run by entrepreneurs.<sup>31</sup> Implied in the first postulate but not implicitly stated is the notion that locals are the ones running things and having the greatest effect. It follows that if entrepreneurs are the ones in charge of the entrepreneurial programs, then their companies are locally based, even if the companies themselves have a national or international presence. Again, more research is needed to determine the accuracy of these hypotheses.

### 3. More Advanced, More Network?

While 1MC seems to be a highly popular program, it is one of many entrepreneurship programs and events in Kansas City. In the next two sections, we extend our analysis to the connections between 1MC and other local programs.

This third section particularly examines the relationship between the number of local program attendees and entrepreneurs’ stage of business. Conventional wisdom suggests that more networking activity should lead to more advancement in their businesses, since more network activity would provide

access to more information and resources to entrepreneurs; however, past academic studies<sup>32</sup> posed mixed results: some found positive relationship (i.e., more network activity = more advancement in entrepreneurship), many found null relationship (i.e., no connection between network activity and business advancement), and others found even a negative relationship (i.e., more network activity = less advancement in entrepreneurship). These all suggest that we should not assume that more network activity is better, and examining by case and context is important.

This 1MC survey gives us the advantage of measuring business advancement by multiple indicators, while almost all the past academic studies have relied on a single indicator. We cross-tabulate this network activity via 1) whether the company generated revenue, 2) whether it has employees, and 3) whether the founder has committed 100 percent to the new business.<sup>33</sup>

Table 5. Number of Local Programs Attended by Stages of Business

	Count	Average of Programs Attended
<b>Revenue-Generating</b>		
No	52	2.00
Yes	58	1.66
Non-founders	51	0.98
<b>Grand Total</b>	<b>161</b>	<b>1.42</b>
<b>Having Employees</b>		
No	41	1.78
Yes	70	1.79
Non-founders	51	0.98
<b>Grand Total</b>	<b>162</b>	<b>1.42</b>
<b>Full-Time Commitment</b>		
100% for this company	53	1.56
Have another job	48	1.85
Non-founders	51	0.98
<b>Grand Total</b>	<b>152</b>	<b>1.36</b>

Source: Ewing Marion Kauffman Foundation

We clearly see that non-founders are less connected to programs than founders in all three advancement indicators. Additionally, having employees does not make a difference in

31. The Kauffman Foundation left the daily administration of the 1 Million Cups program to local entrepreneurs for exactly this reason, to have actual entrepreneurs within each community running the program.

32. There are a good number of studies on this subject, and we omit details for this report. See Hoang and Antoncic 2003, and Quan and Motoyama 2010 for details.

33. We asked these questions in both November 2012 and May 2013, and analyzed in both periods. We obtained the same results and present only the findings from the more recent May survey.

the number of local programs attended. We do find a statistical difference in that founders with business revenue attend fewer local programs than founders with no business revenue. This implies that founders who already have revenue (and perhaps a more established network) feel less of a need to attend events than those still trying to establish their revenue stream. Moreover, founders who are 100 percent committed to the company attend fewer local programs than founders who have another job. These findings suggest that entrepreneurship and networking patterns do not follow a simple linear process. While these descriptive analyses do not reveal any causal relationship, they do indicate that more local networking activities do not necessarily advance entrepreneurial stages.

While we need more research to understand why these patterns exist, our method of asking stages of entrepreneurship by multiple dimensions gives a hypothesis that entrepreneurs who are 100 percent committed to their business become more selective in attending local events and programs. While meeting other entrepreneurs can be fun and fruitful in terms of learning, it consumes a great deal of time, which is a severe constraint for busy entrepreneurs. Similarly, entrepreneurs with existing revenue may be more selective in how they spend their time and/or may not feel as pressing a need to build their network. On the other side of the coin, entrepreneurs with no revenue may spend more time in networking in order to find potential customers or ways to spread the word about their new businesses. Again, these are speculative hypotheses, and more research is needed to support or refute them.

These hypotheses and findings also support Feld's postulates. The third dictates that the community must have organized activities that engage people in an entrepreneurial context: activities other than cocktail or networking parties. 1MC is one such event. We next examine other local entrepreneurship-related activities in Kansas City and how they all work together to increase entrepreneurial activity in the community.

## 4. Local Networking Patterns

The last section analyzes the network patterns of 1MC participants in the broader local context. With about 250 regular participants weekly, 1MC seems to have affected the local scenery of entrepreneurship in a positive way, particularly in broadly IT-oriented startups. It is tempting to conclude that 1MC reaches a significant portion of IT entrepreneurs in the region; however, no data exists to estimate the number of startups or early-stage firms in this region that are comparable to 1MC participants.<sup>34</sup> How much 1MC reaches the full entrepreneurial population in the area is a tough question to answer, because asking 1MC participants alone does not provide a complete picture. By definition, people in the same network tend to have similar scopes of activities, and seeing the same people all the time does not necessarily mean that such levels of networking reach the majority or all of the population. Our record of 1MC presenters indicates that there are many different types of entrepreneurs other than in IT-related businesses, but we have little information about their other local activities.

Figure 2<sup>35</sup> visualizes patterns of 1MC participants and how they participate in other local programs and events. Survey respondents are represented by small, colored circles (men) or squares (women), while programs are represented by larger, empty circles. 1MC participants have high overlap with Startup Weekend (also demonstrated in their Twitter follows earlier), KC Tech Cocktail, Think Big Partners, and several other programs. Small dots in the outer circle look like satellites and represent 1MC participants who do not participate in any other local programs.

Because this network pattern is of self-selected 1MC participants and does not reveal other entrepreneurs and network patterns in the region, we use a different approach to analyze it. Taking advantage of Kauffman's other operations in Kansas City, we conducted a survey from another program of ours, Kauffman FastTrac. We use the result of our earlier survey in November 2012,<sup>36</sup> which coincided with the survey of FastTrac graduates,<sup>37</sup>

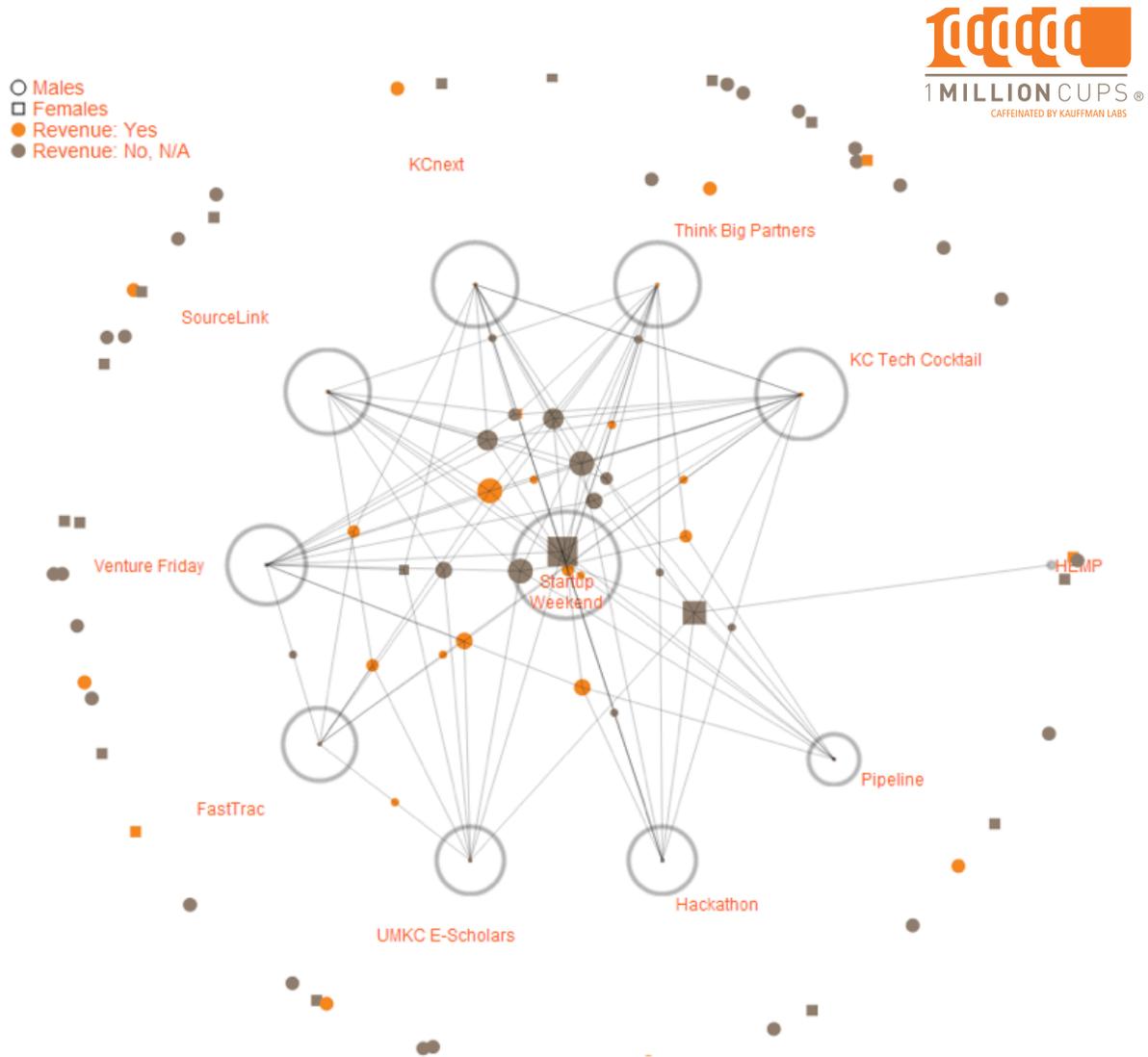
34. As a reference, we can estimate from National Establishment Time-Series (NETS) that the number of startups in the IT sector ranged from 106 to 234 between 2008 and 2010 (Hathaway 2013); however, we cannot make any comparison to 1MC participants.

35. The interactive version of this graphic is available at: [http://bellmast.github.io/1MC\\_Viz2/](http://bellmast.github.io/1MC_Viz2/).

36. Note that the number of 1MC participants during this period was 145-165, significantly smaller than the current 250, and there is always a possibility that more overlap between 1MC and FastTrac may have been created since then. More updated research is needed; however, we estimate such possibility is small, because the local networking patterns of 1MC participants have remained essentially the same between the two periods, and there were few 1MC participants who also attended FastTrac.

37. FastTrac has three programs: NewVenture for starting a new company, GrowthVenture for scaling up an existing company, and TechVenture for starting a new technology-oriented company. We distributed our survey to graduates of all three programs, but the majority of respondents are NewVenture graduates.

Figure 2. Participation of 1MC Attendees in Other Local Networks and Programs (May 2013)



Source: Ewing Marion Kauffman Foundation

and compile the results of a single, shared question between the surveys: “What other programs have you attended?” There are three programs of overlap in addition to 1MC and FastTrac: KCSOURCELINK, Kcnext, and Startup Weekend. We analyze the differences in program attendance among the three shared programs, in addition to how they relate to both 1MC and FastTrac. Figure 3 visualizes this result.

We anchor FastTrac graduates and 1MC participants to circles at the top and bottom of the visualization, respectively.

Fanning out from FastTrac and 1MC are a number of respondents unconnected to anything else—these are respondents who only attended programs other than the three being analyzed in addition to either FastTrac or 1MC (e.g., KC Tech Cocktail). Of the 79 total respondents to the 1MC survey, 42 are in the fan, and of the 54 total respondents to the FastTrac survey, 39 are in the fan. This leaves 37 respondents to analyze from 1MC, and 15 from FastTrac.

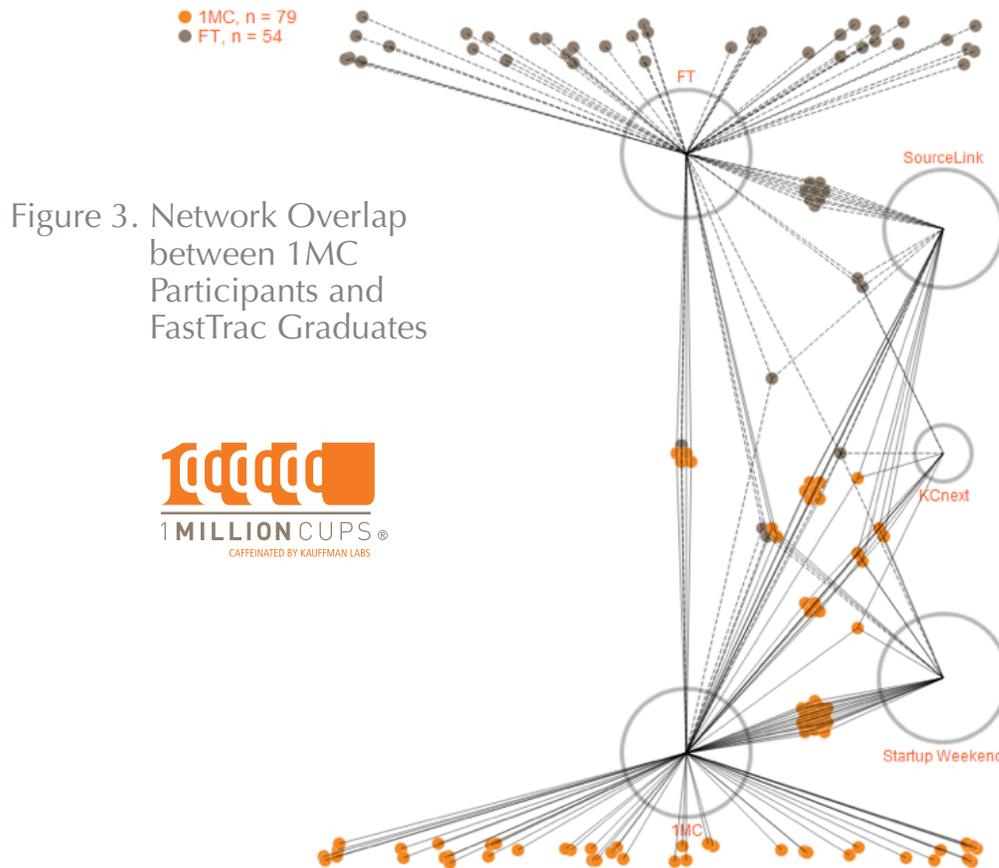
Two major findings stand out. First, each set of respondents was heavily weighted toward a connection with one particular program. For FastTrac, the strongest tie was to KCSourcelink—11 out of the 15 FastTrac respondents were connected to SourceLink, and 8 out of 15 were connected solely to it. For 1MC respondents, the biggest connection was clearly to Startup Weekend, to which 21 of 37 (57 percent) respondents were connected, and 14 of 37 (38 percent) were connected solely to it. So, not only do we observe that FastTrac and SourceLink are particularly tied, and likewise 1MC has strong ties to Startup Weekend, but also the biggest clusters we observe are respondents who listed those programs as the *only* ones they attended (of the three we analyzed).

The second notable finding is that FastTrac and 1MC respondents do not overlap very much. We observe this in two ways. First, there are very few connections between 1MC and FastTrac directly, with only 5 FastTrac respondents having attended 1MC, and only 6 1MC respondents having attended FastTrac. Secondly, 11 1MC respondents listed attendance to

SourceLink (FastTrac’s biggest connection), and only 3 FastTrac respondents listed attendance to Startup Weekend (1MC’s biggest connection).

One possible interpretation of these results is that the two sets of respondents are dissimilar entrepreneurs who seek dissimilar attributes in the programs they attend. These differences may stem from different individual backgrounds, different types of companies, and other characteristics. While we need further research to figure out the reasons behind the dissimilar network patterns, one thing is clear: One popular entrepreneurial program does not necessarily reach all kinds of entrepreneurs even in the same region. Injecting a local ecosystem with only one program will not be sufficient, despite how popular it seems, and entrepreneurship supporters have to keep in mind what kind of entrepreneurs currently are served by programs and what other kinds of entrepreneurs may not be served.

This again speaks to Feld’s third postulate: that in order for an entrepreneurial community to thrive, organized



Source: Ewing Marion Kauffman Foundation

entrepreneurship-related activities must be offered. We add that, in addition to more than one program, there must be a variety of programs and activities to speak to all levels of entrepreneurs where their needs lie, thus also satisfying Feld's second postulate about porous boundaries and involving the entire stack in the process.

## 5. Implications

Allow us to revisit our findings and provide implications. In this paper, we had four analyses on the networking patterns of 1MC participants.

In Section 1, we tried to resolve the tension between two streams of thought: Popular national media outlets advocate that entrepreneurs should follow national figures, while in our experience entrepreneurship is mostly a local phenomenon. In this account, we find that the most popular Twitter feeds that entrepreneurs follow are overwhelmingly—as much as 85 percent—local. Twitter also is not solely a tool of the young, but used across all age levels, which speaks to Feld's second postulate about including all levels of entrepreneurs in the process. Furthermore, entrepreneurs are studious to their trade and follow entrepreneurial leaders and support organizations more than celebrities.

In Section 2, we analyzed whether 1MC participants follow each other, and if such a following pattern has changed over time. The network started rather sparsely, but thickened over time; however, with our descriptive analysis, we cannot conclude if 1MC induced the thickening effect or what kind of people gained more followers over time. Further research is needed on this matter, but we hypothesize that local entrepreneurial leaders will emerge, reinforcing Feld's first postulate that the community must be led by entrepreneurs themselves, rather than policymakers, professors, or agency administrators.

In Section 3, we analyzed whether local networking patterns are associated with stages of entrepreneurship. We observed a non-linear pattern of networking and growth, i.e., more networking does not necessarily lead to more advancement of entrepreneurship. In fact, we find that entrepreneurs with full-time commitment and with existing revenue attend fewer networking activities. While this path of business development is complex and we need further study to advance our understanding, we hypothesize that entrepreneurs whose businesses are on track have less time to socialize and become selective about what

they attend. They may also feel less need to network after their businesses reach a more established level. This also suggests that, at the local macro level, simply more entrepreneurship networks, events, and programs may not serve entrepreneurs well; rather, it will be more important to see a variety of activities by and for different stages of entrepreneurs, corresponding with Feld's third postulate regarding organized events.

In Section 4, we tested how much 1MC reaches a diverse array of local entrepreneurs. We first found that 1MC participants overlap heavily with Startup Weekend, KC Tech Cocktail, and Think Big Partners. Additionally, we found that 1MC participants have little overlap with Kauffman FastTrac graduates, who had some overlap with KCSourceLink. This suggests heterogeneity of the entrepreneurship ecosystem even in the same local community.

This heterogeneity applies to even the 1MC program, which seems highly popular; its weekly attendance of 250 people is by no means small. Yet, we need to keep in mind that one size does not fit all in any local entrepreneurial ecosystem, and different entrepreneurs seek and build a diverse array of networks. When promoting entrepreneurship, policymakers and supporters should consider what kinds of entrepreneurs currently are served and what types of entrepreneurs are underserved. This also supports Feld's third postulate: that to build a robust and thriving entrepreneurial ecosystem, organized entrepreneurial activities need to exist that speak to entrepreneurs wherever they are in their entrepreneurial journey.

Taken together, our findings suggest that, even in this digital age and with costless, powerful communication tools such as Twitter, entrepreneurship is largely a local phenomenon using personal connections, and entrepreneurs primarily exchange information via word of mouth. If the public sector or entrepreneurship support organizations attempt to engage with entrepreneurs, they should target local sources and in-person events.

Furthermore, combined with our findings from our previous paper regarding the power of word of mouth, we conclude that the nature of the network among entrepreneurs is extremely thick and local. It is not as effective for entrepreneurship support organizations to provide information on their websites or via Twitter; these organizations have to cultivate specific key people in the entrepreneurial scenery, if present, in order to spread the word and build entrepreneurial networks. We have to note that this sample was based in the Kansas City region, where several key organizations for entrepreneurship have been active for years, such as the Kauffman Foundation, KCSourceLink, and

Silicon Prairie News. Further research is required to see if this phenomenon operates the same way in other metropolitan areas, especially in the absence of such local assets.

Circling back to Brad Feld's *Startup Communities* and the four postulates of his "Boulder Thesis" to guide entrepreneurial communities who wish to grow, we find empirical support for Feld's work. Entrepreneurs are leading the community. Boundaries are porous and include entrepreneurs at all stages, levels of experience, and ages. A number of organized entrepreneurial activities and events exist, and the programs are diverse enough that they speak to different entrepreneurs where their specific needs lie. Time will tell if community leaders are committed for the long term, but, again, with support organizations such as the Kauffman Foundation, KCSourcelink, and Silicon Prairie News that have been in place for years, all signs are positive that the Kansas City ecosystem is a beneficial one to entrepreneurs looking to start or grow a business.

In this paper, we used new and innovative research methods, particularly by tracking Twitter handles. We admit that Twitter is only a portion of where entrepreneurs find their information and a small representation of their connections, and the results inherently have limitations. At the same time, the findings from our Twitter analysis are highly complementary to findings from other research methods and point out the locally embedded nature of entrepreneurship. In that sense, we do not think that our analysis will likely deviate from the nature of information collection and networking patterns among entrepreneurs, though confirmation by further data and research methods is needed. Again, these are findings based on entrepreneurs located in the Kansas City region, and we do not argue that the findings will universally apply for all cities. That said, such a limitation would not undermine our findings because the purpose of this research is exploratory, i.e., to discover the nature of previously unstudied behavior. We welcome new and innovative uses of Twitter handles and other data to trace the patterns of information collection and networks by entrepreneurs. We will further welcome collaboration by 1MC organizers and participants, as well as other entrepreneurship programs in other cities, so that all of us can deepen our understandings about entrepreneurship.

## References

- Acs, Z.J. and C. Armington. 2006. *Entrepreneurship, geography, and American economic growth*. Cambridge: Cambridge University Press.
- Feld, B. 2012. *Startup communities: Building an entrepreneurial ecosystem in your city*. Hoboken, NJ: John Wiley & Sons.
- Feldman, M.P. 2003. Entrepreneurship and American Research Universities: Evolution in Technology Transfer. In *The Emergence of Entrepreneurship Policy; Governance, Start-ups, and Growth in the U.S. Knowledge Economy*, ed. D.M. Hart, 92-112. Cambridge: Cambridge University Press.
- Hathaway, I. 2013. Tech starts: High-technology business formation and job creation in the United States. In *Kauffman Foundation Research Series*. Kansas City, MO: Ewing Marion Kauffman Foundation.
- Hoang, H. and B. Antoncic. 2003. Network-based research in entrepreneurship: A critical review. *Journal of Business Venturing* 18:165-187.
- Konczal, J. 2013. The most entrepreneurial metropolitan area? In *Kauffman Foundation Research Series*. Kansas City, MO: Ewing Marion Kauffman Foundation.
- Malecki, E.J. 2007. Cities and regions competing in the global economy: Knowledge and local development policies. *Environment and Planning C* 25:638-654.
- Motoyama, Y. and B. Danley. 2012. The ascent of America's high-growth companies: An analysis of the geography of entrepreneurship. In *Kauffman Foundation Research Series*. Kansas City, MO: Ewing Marion Kauffman Foundation.
- Quan, X. and Y. Motoyama. 2010. Empirical disaggregation of social networks: A study of ethnic professional associations and entrepreneurship in Silicon Valley. *Journal of Small Business and Entrepreneurship* 23:509-526.
- Stangler, D. 2013. Path-dependent startup hubs: Comparing metropolitan performance. In *Kauffman Foundation Research Series*. Kansas City, MO: Ewing Marion Kauffman Foundation.



Ewing Marion  
**KAUFFMAN**  
Foundation

041514

4801 ROCKHILL ROAD KANSAS CITY, MISSOURI 64110 816-932-1000

[www.kauffman.org](http://www.kauffman.org)