

Survey Report

July 29, 2016

The Cloud Foundry Summit 2016 in Santa Clara, California Attendee Survey offers insights into attendees and how they use Cloud Foundry. This report has been distilled into two discrete sections:

- Who attended—where are they on their Cloud Foundry journey, how are they using Cloud Foundry, what do we know about their "tech demographics", etc.;
- What do they think about Cloud Foundry—how familiar are they with Cloud Foundry, how did Summit impact familiarity, what do they value about Cloud Foundry, etc.

The survey of 328 attendees (approximately 20% of all attendees), The margin of error for this survey is +/- 4.8% for the full sample.

I: Who Attended Cloud Foundry Summit 2016

This section details findings about the "demographics" of Cloud Foundry Summit 2016 attendees.

- **Finding 1.1: Mostly IT companies attending.** Attendees at the summit—not counting those from Cloud Foundry members²—are predominantly from the IT industry (54%). Apart from IT, 12% come from financial services and 5% come from telcos, the next 2 most-represented industries.
- **Finding 1.2: Mostly enterprise companies.** Attendees are largely enterprise. A majority (75%) are with companies of 1,000 employees or more, including 43% who have 10,000 employees or more.

¹ Unlike a traditional online panel in which we do not know the demographic characteristics of the total population or the relationship of the sample to the total population, in this case we are able to reach the entire population. As such, we can calculate a margin of sampling error. Due to the small total universe, the margin of error is calculated differently and presents a lower MoE than it would if it were a much larger population (this is typically done for populations below 5,000). However, since we still do not know the demographic characteristics of the total population, no corrective weighting or pre-sampling quotas were put in place to ensure a representative nature of the sample. If you are still reading without glazed-over eyes, we applied you.

 $^{^{\}rm 2}$ Unless expressly stated, as in this case, data in this report represent total attendees.

Given Cloud Foundry members' focus on enterprise and the challenge of the initial Cloud Foundry install, this is not particularly surprising but indeed a positive sign that there is so much enterprise interest and attendance.

- Finding 1.3: Only a third are developers. In a somewhat surprising finding, only a third (39%) of attendees are developers. The rest are mostly managers (25%), operators (15%), and line of business (6%), with a smattering of "consultants" (2.5%), "sales" (2.5%), and a few other smaller groupings. Considering Cloud Foundry's "developer-centric" approach and messaging, we find the low share of developers at Summit rather interesting. We believe that points to a maturity of Cloud Foundry that it has moved beyond the leading-edge hype that would attract developers. The focus now is more on process and people, and less on technology and features.
- **Finding 1.4:** A majority are first-time attendees. The recent Infoworld article titled "Cloud Foundry Stages a Comeback" is either right-on or based on the false premise that it ever went away. Most summit attendees are first-timers (60%). Significantly, of the enterprise attendees, a majority of them are also first-time attendees, while a majority of non-enterprise attendees have been before. This suggests a maturity of Cloud Foundry, another sign of having crossed the chasm. Along these same lines, only 41% of first-time attendees are in full production (nearly 20 points below the summit-wide average; see Finding 1.5) with 28% in PoC or still early days consideration of Cloud Foundry.
- Finding 1.5: Most attendees are already in full production with Cloud Foundry. Another sign of Cloud Foundry's maturity is that 59% of attendees have Cloud Foundry in full production already. Another 19% have it under development or in testing, and 11% are in the PoC stage. That is, 89% have already deployed or begun testing Cloud Foundry in some way. Looking at the remainder, 11% are considering Cloud Foundry and 1 attendee is "not considering" Cloud Foundry. Again, this is another sign pointing to Cloud Foundry's maturity in the industry.
- Finding 1.6: Nearly half of attendees run Cloud Foundry on their own rather than using a provider. Only 10% of attendees exclusively deploy provider-managed Cloud Foundry. Another 37% say they run their own and use a provider. But the plurality of attendees (49%) say they run Cloud Foundry on their own. Ironically, many of those who run Cloud Foundry on their own complain about the lack of documentation, how hard it is to get Cloud Foundry up and running initially, or that they cannot keep up with the updates because they come too quickly for them to manage. The offset in complexity that Cloud Foundry is supposed to help bring about is at least partly offset by self-management struggles for these users, the majority of whom (62%) are very large enterprise (10,000 employees or more).
- Finding 1.7: The kinds of apps run on Cloud Foundry are all across the board. Attendees report running a huge variety of apps, from database and analytics to web services and Java to mobile and IoT. For the next survey, we should consider pre-populating this question with these and other examples to gain a clearer picture of the situation.

- Finding 1.8: Cloud Foundry users are mostly multi-cloud. A majority of attendees are on AWS (59%) as the leading laaS of choice. Close behind (within the margin of error), 55% are on VMWare's VSphere. Trailing in 3rd, 45% of attendees say they are on OpenStack. And in a distant 4th, 23% are on Azure.
 - Clearly, Cloud Foundry is in a multi-cloud world already. In fact, 55% of summit attendees are already multi-cloud. Specifically, 24% are on an AWS+VSphere+OS combo, with a large share of them also on Azure. Another 14% are on an AWS+VSphere combo, and 7% are on AWS+OpenStack.³
- Finding 1.9: Containers are nearly ubiquitous among attendees. A whopping 71% of summit attendees are already using containers. Of those, 88% are using Docker, 55% are using Garden, and 39% are using Warden. Only 11% are using LXC, 3% are using rkt, and 2% are using LXD. This is as clear a sign as any that Cloud Foundry is a container-based community. Analysts and other external audiences who wonder "what Cloud Foundry's container strategy is" need look no further.
- Finding 1.10: Cloud Foundry is used—but far from exclusively—for container management.

 Orchestration tools alone may not be enough to manage containers but if this survey has anything to add to the conversation it might be that "PaaS alone isn't enough either." Only 35% of container-using respondents use Cloud Foundry for all of their container management, but a 43% plurality use it for some—but not all—of their container management.

II. WHAT DO THEY THINK OF CLOUD FOUNDRY

- Finding 3.1: Summit succeeds in making attendees more familiar with Cloud Foundry.

 Cloud Foundry Summit 2016 attendees start out with decent levels of familiarity, both of PaaS options generally (58% 8-10 on a 10-point scale) and of Cloud Foundry specifically (63% 8-10). Devs and ops tend to be higher on both scores than their counterparts, which makes sense and suggests that this is less a situation of "what's this Cloud Foundry thing I'm hearing about?" and more a case of "we are using Cloud Foundry...I need to learn more!" This stands in contrast to 2015 research suggesting a much lower overall familiarity with PaaS.
- Finding 3.2: Summit attendees are very likely to recommend Cloud Foundry. An overwhelming 84% of attendees are very likely to recommend Cloud Foundry (8-10 on a 10-point scale), including 71% who give a score of 9 or 10. Similarly, 83% of attendees say Cloud Foundry is better than the other PaaS options (8-10 on a 10-point scale). While not surprising unto itself, these figures exceed the ratings on "familiarity", which is a strong sign of brand/product loyalty.

³ This level of cloud proliferation could be "grain of salt" territory—we did not, for example, go to the same lengths of data quality control that we do for the GPS, and so some of these attendees may just be "checking the box" to try to win a Dell computer. However, in order to be prize eligible, they only had to fill in their name and email address, so we believe most people who completed the survey did so truthfully. They had no incentive not to. Therefore, it is entirely possible that these enterprises, especially the very large ones, are indeed running across a several clouds. This would be in line with Gartner, 451, and other research shops showing 4+ clouds per company on average.

- Finding 3.3: Community, open source, simplicity, and speed—leading values of Cloud Foundry according to attendees. We asked attendees a series of statements and whether they agree or disagree with each. The strongest statements among all respondents in order are as follows (the figure in parentheses represents the share of respondents who say they "strongly agree" with the statement):
 - Community (81%): "It is important to me that Cloud Foundry has such a vibrant community."
 - Open source (78%): "It is important to me that Cloud Foundry is open source."
 - Simplicity (74%): "Cloud Foundry significantly simplifies application delivery."
 - Speed (67%): "Cloud Foundry significantly speeds up our application development and delivery cycle."

The community message is tops for all roles. But these figures do vary by role somewhat. For example, operators also love the "Quality of Code" statement ("Cloud Foundry has high-quality code"), which comes in second for them. Developers really love the "open source" message (listed above). Managers love a "Flexibility" message ("Cloud Foundry lets us use the cloud, languages, frameworks, and services we want"), which comes in second for them.

