The role of open source market intelligence in our cloud open source strategy

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Our approach to open source in the cloud

Enable
An open and flexible platform that meets you where you are and adds value to your existing investments

Integrate
Embracing leading ecosystems, increase agility and offer consistent open source offerings

Release
Support a strong ecosystem to achieve more through Microsoft’s own portfolio investments

Contribute
Extend the community and reach to more people, and partner for first-class experiences

Open Source Partners & Ecosystem
Everyone in your org should know

What open source means
Why open source is important
What are our business goals?
How close are we to meeting these?
What is expected from us?
Azure + Open Source GTM

Business Development → Field
Engineering → Industry
Partners ← OSS Go To Market Strategy
Audiences
GTM components

- Measures of success
- Positioning & messaging
- Research & MI/CI
- Joint partner GTM plans
- Field enablement
- Product launches & EOLs
- Customer experience and value proposition
- Program & initiative alignment

- Supporting media engagements
- Open source cloud portfolio
- Open source capability roadmap
- Industry relations
- Global campaigns
- Partner onboarding
- Internal community building
- Readiness at scale
The project

- **90+** Events parsed every month
- **150+** Core technical team
- **15+** Distinct reporting categories
Reactions

Support management: “This is very informative research that we want to get in front of our leadership”

Engineering leadership: “You’ve added a couple more hours to my weekend reading assignment”

Field leadership: “There’s so much to learn…” 😞
But why?

Short-term (< 3 mo.)
- Specific
- Can be reactive

Mid-term (9-12 mo.)
- Aspirational
- Still strategic
- Informed viewpoint
- MI/CI Focus of Influence

Long-term (18 mo.)
- Ambiguous
- Eager to anticipate...
- ...but not always research driven
Current practice

- Media & analysts
- Outlets like Lxer, Linux News, OSOR
- Community sentiment on Twitter, LinkedIn, etc.
- Hacker News, lobste.rs, Reddit
- Commissioned research
- TW Radar, Changelog’s Ping, cron.weekly & other roundups
- MSFT’s own research, sometimes including programmatic OSINT

Sources

Aggregation

Analysis & distribution
Key themes

Open source in the cloud: 2016

- Bespoke PaaS (incl. serverless)
- Linux in IoT
- Postmodern open source governance challenges
- Core Linux infrastructure innovation
- Strong Node.js momentum in the Enterprise
- PHP 7 reinvigorating ecosystem
- End-user open source apps
- Next wave of open source data solutions
- Configuration management to ALM and containers
Key learnings

Adapt formats to different platforms of influence
E-mail works well for weekend reading, mind map for simulations, aide-memoire for executives...

Some insights have an expiration date
Yet your maturity curve will define how long the fundamentals will stick

Expect bias and conflict, have a plan
Jess Rose: “We can’t eliminate all our biases. But we have a duty to try!”
Challenges

We get anxious when there’s silence

We pay attention to more things
Applying classification methods to report

- $n=621$
- Roughly 10 months of events, manually categorized
- Text classification methods exhibit poor accuracy, both in supervised and unsupervised methods, might indicate source bias and insufficient samples in some categories
  - Tree: 30%
  - Bayes: 25%
  - SVM: 33%
  - KNN: 34%
Inferring topics (LDA)

```r
> lda <- LDA(mat, k)
> terms(lda)
  Topic 1  Topic 2  Topic 3  Topic 4  Topic 5
  "docker"  "data"  "can"  "open"  "cloud"
```
Inferring clusters (K-means)

- Docker/K8S
- Linux/IoT
- Data/Postgres
- OSS App Plat
- Linux/OpenStack
With automatic classification

\( n=212, \text{ using KNN} \)