



newsmast

Knowledge for all for good

**MAPPING FEDIVERSE
COMMUNITIES**

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www.newsmastfoundation.org

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News mast is helping to grow knowledge-sharing across the Fediverse and beyond.

Over the last six months News mast has been using follows and relays to populate our Mastodon server with knowledge-sharing content from all over the Fediverse. We take a pretty broad view of what knowledge-sharing is - it's not just academic subjects. We've grouped this content into 62 knowledge-based Communities and can now share a first look at what we've found.

This is an initial snapshot of the data, which we are publishing to invite collaboration. So, please be kind!

We'd love to hear from Fediverse observers, data scientists and people participating in these Communities who can help us delve into and further understand the data. Please take all our findings as preliminary.

We'll follow up with a full report. Our goal is to gain insights into the Fediverse, and ways we can encourage growth.

Our findings so far...



People using micro-blogging for knowledge sharing make up a significant part of the Fediverse, including both the posters, and everyone who is viewing, liking and boosting this content.

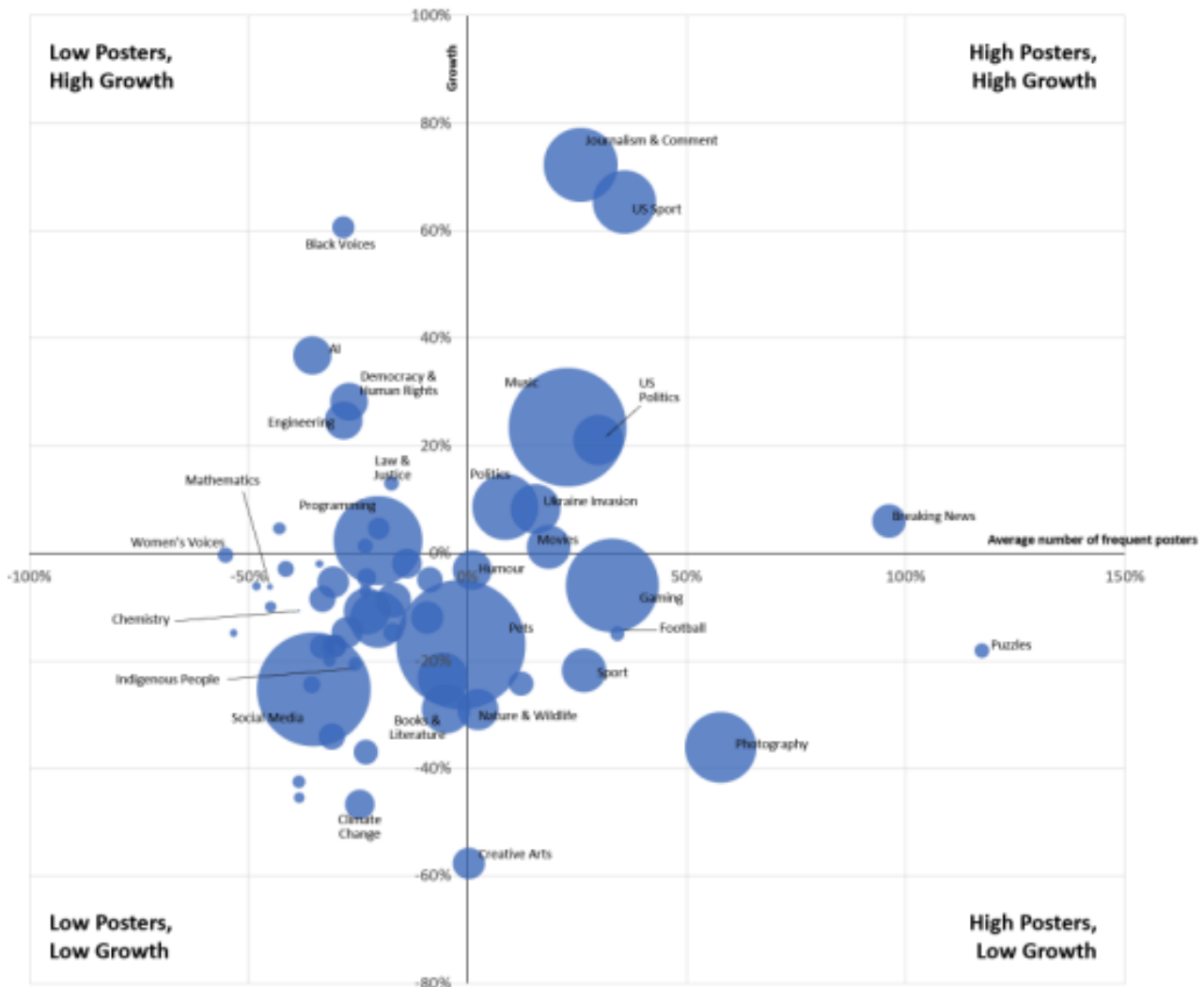
- Around **37,000 unique users** are posting content which matches and feeds into our Communities each month, posting just under **600,000 posts**.
- Taking the industry standard of 9:1 passive users to active posters gives a **total audience of 370,000** for knowledge-sharing in the Fediverse. That's a third of all Fediverse monthly active users, or 40% of Mastodon and Misskey users.
- The Fediverse isn't all tech. There's a good spread of posts and users across all our Communities, with **no Community dominating**.
- Knowledge-sharing has broadly tracked overall Fediverse users, showing a small decline of 10% over the last six months.
- The Journalism & Comment Community has grown strongly, up 72%, most likely driven by the events in Gaza.
- Conversations are driven by a small number of regular posters. **18% of users post once a week or more**, making up 83% of the posts per month.

There are gaps and weaknesses, but it seems that overall, knowledge-sharing is well supported and has a strong, resilient base in the Fediverse.

The Data



Size, growth and density of frequent posters

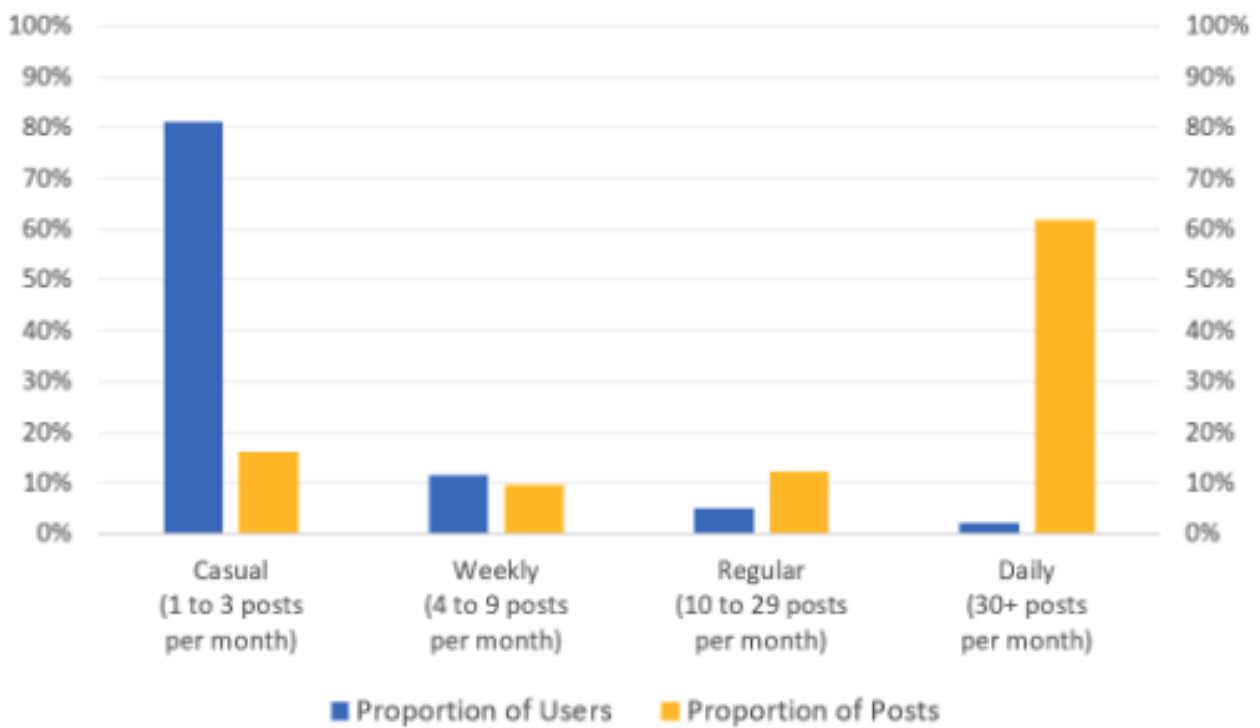


NB. Full data set is available in Appendix 1

The Data



Distribution of posters and posts



Data Set



Our server pulls in content on a similar scale to the biggest servers in the Fediverse.

We see about 95% of the content you'd find on the largest server, mastodon.social. So it's a good way to look at the whole Fediverse. NewsMast doesn't scrape or aggregate data: all the content is on our server through federation, via follows and relays.

We filter out NSFW, crypto and hate speech, so that content is all excluded.

We focus on knowledge-sharing - which means a lot of regular social media posts are not covered, as this isn't what we're looking for. We take a broad view of what knowledge-sharing covers: news, global issues and science, yes; but also activism, music and pets.

Our total numbers for users are based on unique users across all Communities. Our user numbers for Communities are unique within that Community, but users may participate in a number of Communities so are counted in each at the Community level, but not at the overall level.

Knowledge-Sharing is a big part of the Fediverse



Our data only covers posts, not views, likes or boosts. So it doesn't cover the majority of Fediverse users who don't post at all, but are reading, liking and sharing this content.

The standard ratio in social media is 9:1 passive users to active posters. (*Source: Nielsen Norman Group, <https://www.nngroup.com/articles/participation-inequality/>*)

Over **93,000 people have had something to say** in these Communities over the last six months, which based on the 9:1 ratio implies a total knowledge-sharing audience of **just under one million**.

On a monthly basis, looking at February, around 37,000 users posted across all our Communities, giving an implied monthly audience of over 370,000. That's **33% of the monthly average users on the Fediverse**, based on FediDB, or 40% Mastodon and Misskey users, the two main microblogging platforms.

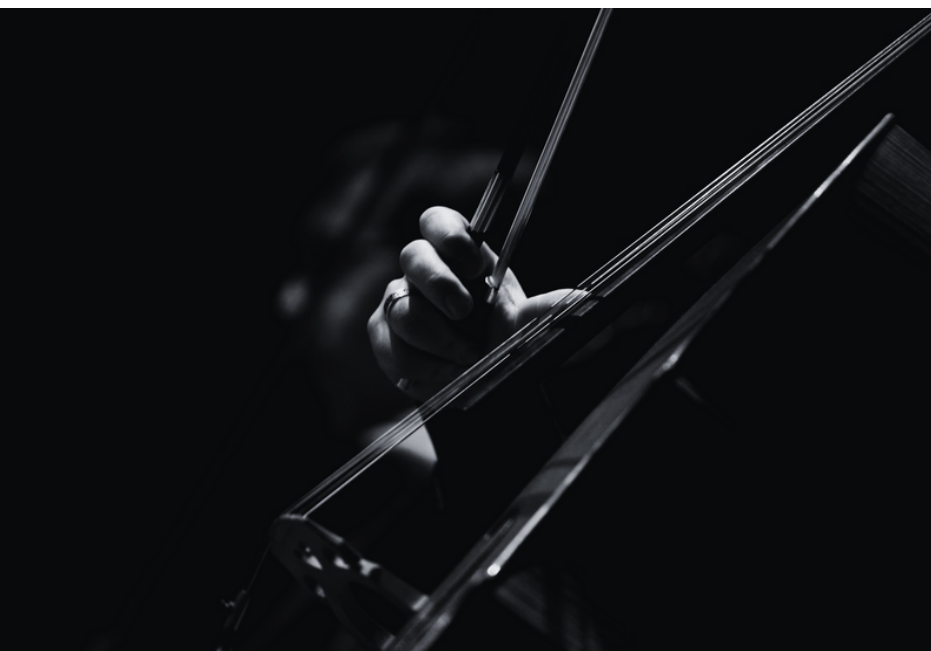
The number of posts across all our Communities was fairly constant over the six months, dropping from just under 600,000 in September to around 575,000 in February, which equates to 595,000 when adjusted for the difference in days between these two months.

There's a good spread of Communities



The common perception of the Fediverse is that posts and conversations are heavily skewed to technology. **We haven't found that.**

There is a good spread of users across all Communities, with no one Community dominating. The largest Communities have a 4-6% share of total users, which is not dominant at all. There are also just eleven Communities with less than 500 posters, or 5,000 estimated users.



The biggest Communities...



Taking the latest month, February, the biggest Communities by poster and user numbers are:

Community	Posters	% of Posters	Est. Users
1. Pets	5,066	6%	50,000
2. Music	4,636	5%	46,000
3. Social Media	4,464	5%	45,000
4. Gaming	3,669	4%	37,000
5. Programming	3,478	4%	35,000
6. Journalism & Comment	2,903	3%	29,000
7. Photography	2,800	3%	28,000
8. Politics	2,591	3%	26,000
9. US Sport	2,482	3%	25,000
10. Technology	2,217	3%	22,000

Reflection: The biggest Communities



So while more lifestyle knowledge sharing is important, there are also core knowledge-based Communities in the top ten.

Notably, Social Media is right up there - everyone loves talking about the platform they are on, and the platform/s they've left.

Further research is needed to understand how active and cohesive these Communities are, and how much engagement there is within them.



The smallest Communities...



The smallest Communities by poster and user numbers are:

Community	Posters	% of Posters	Est. Users
53. Energy & Pollution	478	0.6%	4,800
54. Biology	472	0.6%	4,700
55. Philosophy	444	0.6%	4,400
56. Performing Arts	423	0.6%	4,200
57. Hunger, Disease & Water	339	0.4%	3,400
58. Physics	298	0.4%	3,000
59. Disabled Voices	293	0.3%	2,900
60. Indigenous Peoples	240	0.3%	2,400
61. Mathematics	240	0.3%	2,400
62. Chemistry	109	0.1%	1,000

Reflection: The smallest Communities



Further work is needed to look into these Communities.

The natural sciences appear to be a small part of the knowledge-sharing Fediverse, as are some minority groups and non-profits.

However some of these could be active, densely networked Communities, factors which are outside our current data. More work is needed to understand these differences.



Changes in user numbers over the last six months



Over the period September 2023 to February 2024 the number of **monthly active users in the Fediverse has fallen**.

FediDB shows a decline from 1.26 million to 1.11 million active users, a drop of 12%.

The knowledge-sharing Community has tracked this trend. Looking at the data for all posts and users, overall posts and number of users are down slightly over the period, by 10%.

However some Communities have grown strongly, most notably Journalism & Comment, where monthly users are up by 72%, probably driven by the situation in Gaza.



A small number of active posters drive conversations



Our data doesn't cover the majority of Fediverse users who don't post at all, but are most likely reading this content. 93,000 people have had something to say in these Communities over the last six months.

We've divided the people who post into four groups:

User	Definition	Proportion of users	Proportion of posts
Casual	1-3 posts per month	82%	17%
Weekly	4-9 posts per month	11%	10%
Regular	10-29 posts per month	5%	12%
Daily	30+ posts per month	2%	62%

Taking Casual vs Weekly, Regular and Daily, our Communities form a classic example of the 80:20 rule.

Looking across the Communities we can see that many of the larger Communities have a higher than average percentage of regular or daily posters, while the smaller Communities have many more casual posters, at 90% or more:

Activism & Civil Rights (90%)

Disabled Voices (91%)

Hunger, Disease & Water (91%)

Mathematics (90%)

Philosophy (90%)

Women's Voices (92%)

Looking across all the Communities, around 1,900 users post daily and 14,000 once a week or more.

Over the last six months these regular posters have stayed very constant. These are often the people driving conversations in Communities.

So, the Fediverse has a loyal, committed group of steady knowledge-sharing posters, who together account for over 80% of posts into these Communities.

Further research is needed to understand the benefits heavy posters bring to Communities, and the impact of not having so many of them on the smaller Communities.

Conclusions



Our research shows that knowledge-sharing in the broadest sense has a strong base in the Fediverse.

This is a preliminary snapshot of the data we have gathered on our Communities. We'd like to work with Fediverse observers, data scientists and people participating in these Communities before we draw any further conclusions.

If you're interested in collaborating we'd love to hear from you!

Our goal is to gain interesting insights into how the Fediverse is used, and hopefully ways we can encourage growth.



Appendices



Appendix 1

	X-axis	Y-axis	Z-axis
Community	% difference from the average % of posters	Variance (Sep-Jan)	Community Size (Feb 24)
Pets	-2%	-17%	5066
Music	23%	23%	4636
Social Media	-35%	-25%	4464
Gaming	33%	-6%	3669
Programming	-20%	2%	3478
Journalism & Comment	26%	72%	2903

Photography	58%	-36%	2800
Politics	9%	9%	2591
US Sport	36%	65%	2482
Technology	-20%	-12%	2217
Visual Arts	-6%	-23%	2002
Ukraine Invasion	16%	8%	1960
US Politics	30%	21%	1956
Books & Literature	-5%	-29%	1901
Food & Drink	-23%	-11%	1820
Sport	27%	-22%	1735
Movies	18%	1%	1732
Nature & Wildlife	2%	-29%	1598
Humour	1%	-3%	155

AI	-35%	37%	1514
Engineering	-28%	25%	1484
Democracy & Human Rights	-27%	28%	1479
Science	-17%	-9%	1370
Breaking News	96%	6%	1316
Space	-9%	-12%	1269
Creative Arts	0%	-58%	1256
Mental Health & Wellbeing	-31%	-5%	1248
LGBTQ+	-27%	-15%	1216
Climate Change	-25%	-47%	1165
TV & Radio	-14%	-2%	1157
Academia & Research	-33%	-9%	1033
Poverty & Inequality	-31%	-34%	1022

Business	-9%	-5%	986
Travel	12%	-24%	969
Government & Policy	-23%	-37%	966
Environment	-33%	17%	962
Social Sciences	-30%	-17%	936
Black Voices	-28%	61%	882
Weather	-20%	5%	837
Biodiversity & Rewilding	30%	-17%	818
Healthcare	-23%	-5%	752
History	-17%	-15%	731
Humanities	-36%	-24%	654
Immigrants Rights	-42%	-3%	642
Markets & Finance	-23%	1%	598

Women's Voices	-55%	0%	596
Law & Justice	-17%	13%	580
Football	34%	-15%	576
Puzzles	117%	-18%	570
Workers Rights	-38%	-42%	510
Architecture & Design	-26%	-21%	505
Activism & Civil Rights	-43%	5%	479
Energy & Pollution	-31%	-20%	478
Bilology	-23%	-7%	472
Philosophy	-45%	-10%	444
Performing Arts	-38%	-45%	423
Hunger, Disease & Water	-48%	-6%	339
Physics	-34%	-2%	298

Disabled Voices	-53%	-15%	293
Indigenous Peoples	-26%	-21%	240
Mathematics	-45%	-6%	240
Chemistry	-39%	-11%	109

