

What's Kooking? Characterizing India's Emerging Social Network, Koo

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The Koo social network

- Koo is a microblogging social-media platform similar in function to Twitter.
- Originally launched in Kannada, it now provides support for Indian languages, such as Hindi, Marathi, Tamil, Telugu, Kannada, Bangla, Assamese, Gujarati, along with English.
- Available in **India and Nigeria**, with a user base of around **15M**.



Screen capture of the trending feed from kooapp.com

- Koo was launched in March 2020.
- It has primarily leaned on two factors to draw users and gain popularity:
 - Support for regional languages.
 - Adherence to local laws and support from governmental agencies and politicians.

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Portion of a promotional flyer released by Koo, highlighting their support for multiple, regional languages.

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#AatmaNirbharBharat #MadeinIndiaApp

Tweet posted by the Ministry of Electronics and IT, Govt. of India promoting its account on Koo. Translation:

"Listen to the [Ministry of Electronics and IT]'s thoughts on the Koo app. Follow - kooapp.com/profile/meity

#SelfSufficientIndia #MadeinIndiaApp"



Timeline of users onboarding onto Koo, from March 2020 to February 2021, segregated by language. The inset graph excludes users of English and Hindi.

Research questions

We aim to study the dynamics of and user-behavior on a platform that grew in such a unique situation.

- What are the characteristics and demographics of Koo users? When did they join the platform?
- What **kinds of content** is posted on the platform? Which **languages** are the most popular?
- What are the **network properties** of Koo and how are they different from Twitter's? What communities are present on Koo?

Data collection

We attempted to collect data for **as many users as possible**, without restricting ourselves to any specific topics, tags, or communities.

- Snowball approach on the follower-followee network.
- Seeded with the Koo's official accounts and the list of popular accounts that Koo recommends users to follow.
- We were able to collect data for about **4M out of the 4.7M users** then present, linked by **160M follower relationships.**
- Also obtained information about **posting activity until March 2021.**

Language distribution



Posting timeline on Koo from March 2020 to February 2021, segregated by language.

The inset graph excludes posts in English and Hindi.

Kannada was initially the most popular language on the platform, however, it was soon overtaken by English and Hindi.

Language distribution

The popularity of Hindi over English, and the substantial amount of content in Kannada and Telugu demonstrate the platform's success in promoting regional languages.

Language	Number of Users	Percentage of Users	Number of Posts	Percentage of Posts
Hindi	1,795,411	44.2030	3,755,829	51.1715
English	968,271	23.8388	1,907,993	25.9955
Kannada	711,049	17.5060	818,679	11.1541
Telugu	259,171	6.3807	359,874	4.9031
Marathi	183,073	4.5072	242,803	3.3080
Gujarati	64,829	1.5960	126,853	1.7283
Tamil	48,285	1.1887	77,981	1.0624
Bangla	31,211	0.7684	49,172	0.6699
Malayalam	318	0.0078	257	0.0035
Assamese	46	0.0011	113	0.0015
Punjabi	43	0.0010	43	0.0005
Oriya	27	0.0006	87	0.0011

Language distribution amongst the users and posts on the platform. Hindi is the most popular language on the platform, followed by English and Kannada.

Content and hashtags

Hashtags promoting Koo often appear together with hashtags supporting politicians and the Government, displaying a nationalist sentiment, or condemning Twitter.

#mondaymotivation #modi rojgar_do #narendramodistadium #modi job do #rahulgandhi #rinkusharma #askgretawhy #hinduism **#yogiadityanath** #toolkitexposed #toolkit #iusticeforrinkusharma #andolanjivi #bollywood **#congress** #coronavirus #shivajimaharaj #pulwamaterrorattack #indiaagainstpropaganda#hindu iaexposesglobalplot #modishowstheway #disharavi #kooindia #modistrikesback #आरक्षण जहर है #iaihind #indiawithmodi #karnataka #arrestallinstigator koovstwitter #koorevolution #mannkibaat #bharatiyasocialmedia indianarmy #motivation #kannada #राममंदिर राष्ट्रीय स्वाभिमान #news #indiatogether #modi #farmersprotest #jaishreeram #pmmodi #देश #जयश्रीराम #covid19 kooapp #motivational #toolkitplot #केजरीवाल मह खोल **#pulwamaattack** #रिंक को इंसाफ दो #aatmanirbharbharat #basantpanchami #atmanirbharbhara #narendramodi #भारत #हिन्द #जय श्री राम #foreigndestructiveideology #koooftheday #मोदी #indiawontconcede #madeinindia a street, all, areas, refer, or #big#india #मोदीर्ज #indvseng #shahvsmamata #सप्रभात #kootime #firstkoo #indiarejectsabuse #bantwitter #मोदी हमारा गवे ह #हर हर महादेव #love #parikshapecharcha #greatbengalbattle #trendingkoo #pulwama #bengalelections2021 #महाशिवराति #auotes #saintrampali #iusticeforrinku #trending #blackday #जय श्रीराम #बसंत पंचमी #aoodmornina

> Co-occurrence network of the 100 most frequent hashtags in posts. Colors indicate clustering based on modularity. Modularity score 0.329.

Content and hashtags



Most frequent hashtags in posts. Font size is an indicator of frequency.



Most frequent bigrams in posts. Font size is an indicator of frequency.



Most frequent terms in user bios. Font size is an indicator of frequency.

Content and hashtags

Union Ministers such as Mr. Piyush Goyal and Mr. Ravishankar Prasad are one of the most liked and mentioned users on the platform. Also on the list are Koo's co-founders and the

Republic TV news channel.

Handle	Mentions	Handle	Likes
republic	16,041	ravishankarprasad	435,752
ravishankarprasad	12,991	piyushgoyal	395,674
kisanektamorcha	11,010	republic	357,745
रिपब्लिक_भारत	9,366	रिपब्लिक_भारत	296,039
piyushgoyal	9,127	meghupdates	277,495
mayank	7,588	rinki	257,266
leledirect.com	7,045	sawatimehera	239,962
aprameya	6,390	chouhanshivraj	185,354
sambitpatra	5,742	narendramodiforyou	181,271
khushbookapoor	5,693	anandranganathan	168,518

Left: User accounts with the most number of mentions. Right: User accounts with the most number of likes.

User network

Koo has a **high local** clustering coefficient, indicating a strong modular structure and presence of communities. We observe **distinct** communities of users based on language. English users are centrally placed between Hindi and Kannada users.



Follower-followee network of verified users on Koo. Node size is proportional to the in-degree (following). Names are shown for prominent accounts. Colors represent language. Local clustering coefficient of 0.561.

Future directions

- The large following of politicians on Koo calls for a deeper analysis of the **political landscape on the platform,** and how it compares to that of Twitter.
- It is also important to study the spread of disinformation, hate, propaganda.
- A study of posting trends by the same users on Twitter and Koo can reveal if **Koo is used just as a mirror of Twitter or if it is used uniquely.**



Thank you

precog.iiit.ac.in/pubs/koo_asonam_2021.pdf

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