

Mapping Growth of the Russian Domestic Propaganda Apparatus on Telegram

Petro VAVRYK¹

¹*Department of Systems Analysis and Decision Making Theory, Faculty of Computer Science and Cybernetics, Taras Shevchenko National University of Kyiv, Address: Akademika Hlushkova Ave, 40, Kyiv, Ukraine, 03680*

E-mails: ¹mappingpaper@protonmail.com;

Abstract

As a part of Western sanctions against Russia, big social media companies i.e., Facebook, Twitter, and YouTube, have been limiting their functionalities available to Russians and suspending and limiting reach of Russian influencers. Many Russian propagandist, aware of the risk of becoming deplatformed, were already looking for social media platforms with less moderation before the February 24th. With many Russians using Telegram as their preferred communicator, Telegram became the natural choice. Russian government, by blocking access to Western social media platforms by Russian users and by directing state influencers to migrate their domestic audiences to Telegram, has accelerated this trend. Despite many advantages, Telegram is limited in ease with which new content and channels can be discovered. Telegram search for channels is based on exact string matching and Telegram has no content search or content recommendation functionality built into it. Telegram's advertising mechanism is still in its infancy. To enable quick growth of the key state propaganda channels, Russians employed several tactics. They have selected a few existing influencers, such as Vladimir Soloviev, to substitute for the absent search and recommendation engine. Soloviev's Telegram channels has been heavily advertised on legacy media, starting with TV stations carrying his programs, to serve as an onramp to Telegram. Soloviev has regularly featured reviews of other smaller channels, endorsing, and promoting their pro-conflict content, becoming the missing recommendation engine for Russians. All the above resulted in creating a vast, Telegram-based apparatus of domestic state propaganda. In this paper, we trace the growth of Russian pro-conflict Telegram communities and quantify the impact of centralized endorsement by state influencers on the growth of other smaller, specialized Telegram channels.

KEY WORDS: *Telegram, Social media analytics, Social media marketing*

1. Research question

Russian social media has grown quite diverse during the past 5 years. VK, OK, YouTube and Facebook were all heavily used by Russian domestic audiences. Telegram has had slow but steady growth over last 5 year and became the preferred personal messenger but was not used a social media platform. Many influencers have started their Telegram channels as backups or tertiary distribution mechanisms, though.

Since Telegram was designed in a way that is less liable to be moderated and controlled as compared to for example domestic VK, Russian state tried repeatedly to block access to Telegram but failed to do so [1]. After February 24th, following imposition of the Western sanctions, Russian state realized a need for a deplatforming-proof social media platform and Telegram was the natural choice, see Fig. 1.

Despite many advantages, Telegram is limited in ease with which new content and channels can be discovered. Telegram search for channels is based on exact string matching and Telegram has no content search or content recommendation functionality built into it. To address this issue, Russian domestic propaganda apparatus leaned on legacy TV pundits to onboard new audiences onto Telegram. This role has been assigned to Vladimir Soloviev, presenter of Russia-1 [2].

Soloviev was given latitude to promote his Telegram channel as a main entry gateway for the Telegram ecosystem. Soloviev then fostered growth of other channels through creating reviews and forwarding their content.

In this paper, we measure the impact of Soloviev endorsements on growth of other Telegram channels and benchmark it against the overall growth of Russian Telegram ecosystem.

¹ Corresponding author.

E-mail address: mappingpaper@protonmail.com

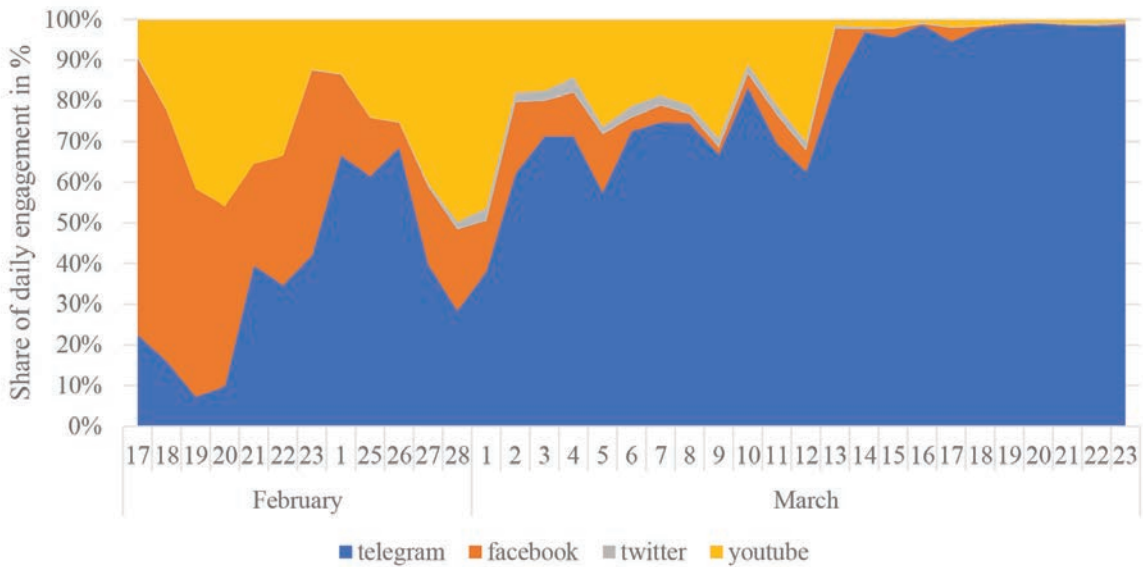


Fig.1. Share of engagements devoted to war in Ukraine on Russian social media by platform.

2. Data sources

We first collected all Telegram posts from Soloviev (36,911 posts since February 2022, including 23,548 forwards from other channels), see Fig. 2. We then collected all Telegram posts from channels forwarded by Soloviev (3,678,480 posts from 1,048 channels) and recorded date and number of views² for each of them. Finally, we collected a sample of Russian language posts in the same timeframe from channels posting on economy, war and politics which were not forwarded by Soloviev (8,346,057 posts from 119,916 channels).

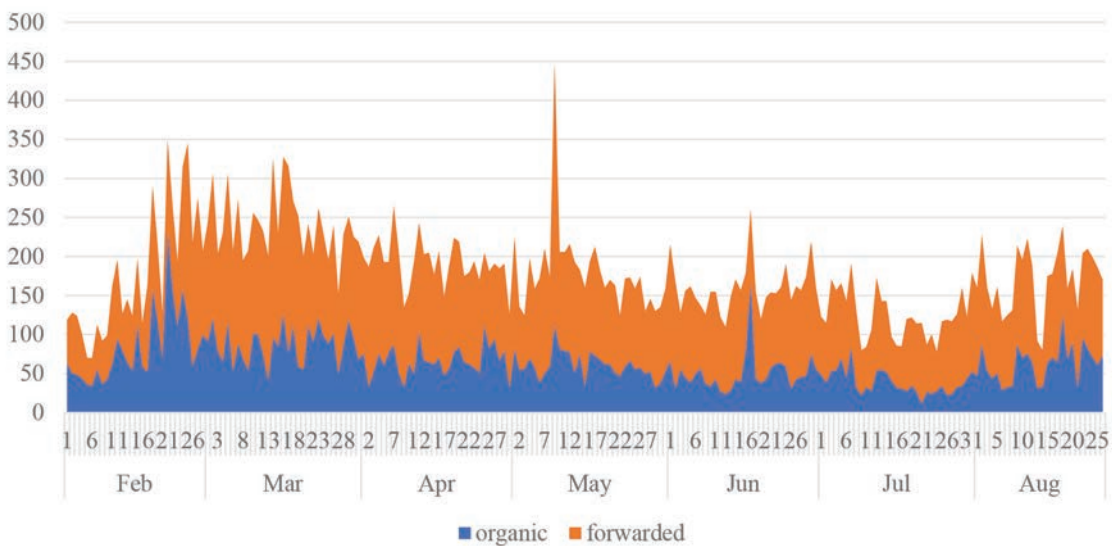


Fig. 2. The daily number of own organic and forwarded posts on Soloviev's Telegram channel.

Table 1 lists channels which were most frequently forwarded by Soloviev. The data is also visualized as a network on Fig. 3.

² Why views: post comments and reactions can be toggled by channel owner at any time for any post, leaving views as the only shared metric proxying passive user engagement with a post.

Table 1.

Channels frequently forwarded by Soloviev

Channel	Month							Total
	Feb	Mar	Apr	May	Jun	Jul	Aug	
dimsmirnov175	67	102	51	74	145	86	96	621
imerkouri	58	99	53	48	49	28	20	355
mariavladimirovnazakharova	53	49	38	30	35	56	42	303
sergeykolyasnikov	12	87	58	42	33	14	21	267
rybar	11	21	26	53	54	42	49	256
rkadyrov_95	2	105	40	33	23	26	18	247
romagolovanov	40	89	50	18	11	19	10	237

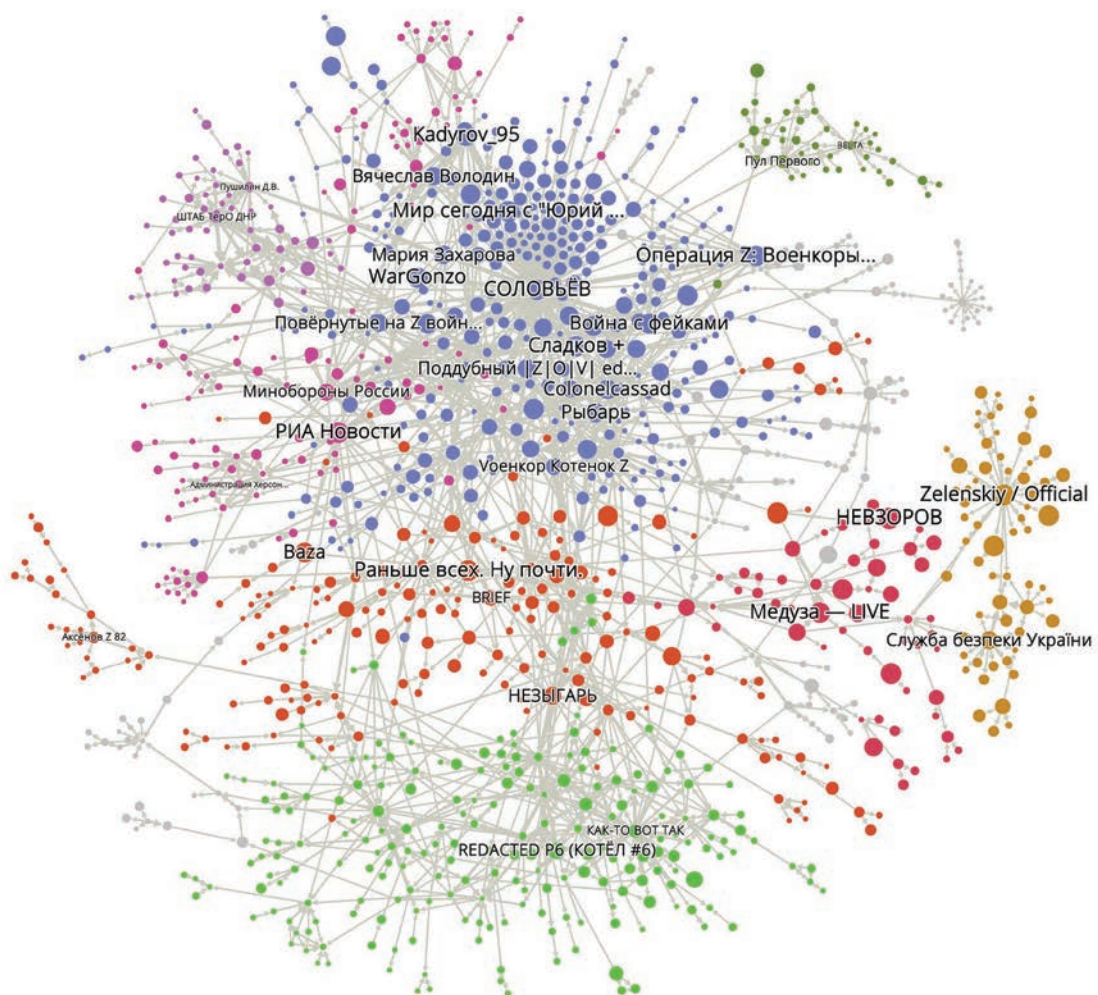


Fig. 3. Each node is an influential Telegram channel posting about war in Ukraine in Russian or Ukrainian language. A link between a source node and target node indicates that target has forwarded at least 6 posts of the source channel in the past 6 months. Colors refer to different Telegram communities. Blue are Russian domestic propaganda channels directly forwarded by Soloviev. Purple channels relate to DNR and LNR. Magenta are official Russian government channels. Brown are Ukrainian channels. A forward chain of length 5 links Soloviev and Zelenskiy.

3. Impact measurement

For each forwarded post, we calculated the average number of post views the forwarded channel received in 5 days before and 5 days after Soloviev forwarded it. We then took the ratio between these two averages, presenting it in Table 2 as a function of month and pre-forward average number of views.

We observe that for channels forwarded by Soloviev:

- Growth rates in February and March were universally high, reaching 70% and decreased afterwards.
- Small channels continue to grow their views at least 25% each 10 days.
- Growth of medium and large channels has stopped and even turned negative.

Table 2.

Soloviev's endorsement impact on average number of views in %

Average views	Month						
	Feb	Mar	Apr	May	Jun	Jul	Aug
< 20K	171%	138%	154%	128%	133%	125%	165%
20K-60K	161%	119%	109%	105%	110%	106%	112%
60K-180K	155%	111%	105%	95%	104%	99%	100%
> 180K	174%	107%	107%	98%	95%	101%	89%

Table 2 does not inform us if the observed trends are due to Soloviev's endorsement or other natural developments in Russian Telegram. To establish that, we took a random sample of posts from channels which were not endorsed by Soloviev and calculated their 10-day growth rates using the same procedure. Growth rates for the sample are recorded in Table 3 and differences between growth rates for channels endorsed by Soloviev and other channels are presented in Table 4.

Table 3.

Base growth rates of views in %

Average views	Month						
	Feb	Mar	Apr	May	Jun	Jul	Aug
< 20K	164%	107%	111%	104%	111%	113%	110%
20K-60K	143%	101%	100%	97%	100%	101%	90%
60K-180K	137%	99%	97%	97%	96%	98%	89%
> 180K	127%	98%	98%	97%	97%	98%	87%

Table 4.

Difference between Soloviev's and base growth rates

Average views	Month						
	Feb	Mar	Apr	May	Jun	Jul	Aug
< 20K	6%	31%	43%	23%	21%	13%	56%
20K-60K	17%	18%	10%	8%	11%	5%	21%
60K-180K	18%	12%	8%	-2%	8%	1%	11%
> 180K	48%	9%	10%	1%	-1%	3%	3%

Per Table 4, Soloviev accelerated the growth of endorsed channels significantly until May, as compared to baseline for Russian Telegram. In May and June, he still had positive impact on small and medium channels, but his impact on large channels was negligible, potentially negative.

One explanation to the no impact of Soloviev on growth of larger channels is behavioral. We posit that by May, most users have already subscribed and muted large channels carrying domestic propaganda. The moment Soloviev forwards a post from a large, muted channel, user clicks on it and navigates to this post's context. Typically, Soloviev forwards recent posts and users can only scroll up the feed to see past posts of the endorsed channel, inflating their views. Since the channel remains muted, they likely will not see subsequent posts. This process results in the negative growth rates.

The return to the growth in July and August can be indicative of two factors:

- People re-engage with previously muted domestic propaganda.
- There is a new wave of mid-size channels with a different take on the current situation that are being endorsed by Soloviev, see Table 5.

Table 5.

Newly forwarded channels by Soloviev

Channel	Month							Total
	Feb	Mar	Apr	May	Jun	Jul	Aug	
Mediastanciacom	0	0	0	0	15	15	5	35
Mkhusnullin	0	0	0	6	9	5	8	28
turchak_andrey	0	0	0	3	7	6	3	19
Bankingtruth	0	0	0	0	2	9	7	18
atas_atas	0	0	0	0	1	11	6	18

4. Conclusions

- Telegram as a platform and the muting behaviors of users counteract emergence of centralized influence apparatus which relies on a few of large channels.
- Users naturally gravitate towards small or medium-size, moderate posting frequency channels with original content.
- Russian propaganda apparatus is likely aware of those dynamics and maintains Soloviev activity in a way that channels which have grown too large or started losing user engagements due to being muted or failed to maintain quality content are phased out.

Acknowledgements

Presented paper has been partially supported by the Ministry of Education and Science of Ukraine: the Joint Ukrainian-Lithuanian R&R Project for the Period of 2022-2023 “Modeling the role of human potential to ensure the defense of the country in the face of modern threats”

References

1. **Guardian News and Media.** (2018, April 17). Russia blocks millions of IP addresses in battle against telegram app. The Guardian. Retrieved from <https://www.theguardian.com/world/2018/apr/17/russia-blocks-millions-of-ip-addresses-in-battle-against-telegram-app>.
2. **Ольшанников, А., Ura.ru.** (2020, January 6). Владимир Соловьев: как стать звездой telegram меньше, чем за год. Информационное агентство URA.RU. Retrieved from <https://ura.news/articles/1036279432>