



LITHUANIAN SOCIAL MEDIA ANALYSIS OF NARRATIVES RELATED TO THE VACCINATION PROCESS AND COVID-19 PANDEMIC AMONG THE LITHUANIAN SOCIETY

MOST COMMON INTERACTED-WITH ACTORS ON "FACEBOOK" REPORTING ON THE VACCINATION PROCESS

Introduction

The COVID-19 pandemic has created a perfect setting for spreading malign and deliberate misinformation, disinformation, and propaganda from various hostile actors. Public trust in state institutions and the government is low – research done by the EESC in 2020 shows that only 24% of the Lithuanian population trust the parliament, 43% trust the government of Lithuania, and only 8% – the political parties. The vaccination process is especially fragile and sensitive to any external or internal meddling. These factors suggest that Lithuania could be potentially targeted by various disinformation and propaganda campaigns to lower the Lithuanian population's motivation and trust in the vaccination process. One of the main sources of information for Lithuanians is social media; as information on such platforms can spread rapidly and there is little oversight, this research explores the potential for manipulating public opinion.

Research and methodology

The research is being conducted using the Pulsar and CrowdTangle tools, which analyse and monitor social network trends by using selected keywords. The research period was selected from January 1 to July 1, 2021, in order to objectively analyse long-term dynamics and trends in the Lithuanian social media sphere. The first report focuses on the ten most interacted-with actors on Facebook who were reporting on COVID-19 vaccination processes in Lithuania.

This report was done using the CrowdTangle tool, and the data set was narrowed using the main (see Keywords used) keywords. The keywords were selected in order to ensure their relevance to the topic of the vaccination process in Lithuania. Additionally, this strict selection of keywords prevented "noise" from the selected data set, as they are specifically tied to the vaccination process and are typically not used in any other posts outside the COV-ID-19 context.

This initial report includes the top most interacted profiles – a short description of the profile (major stakeholder; if applicable – bias;), whether the profile supports the vaccination process, total post count, post interaction percentage, correlation between interaction rate and page followers, profile verification by Facebook administrators.

The research focused on the Total Interactions variable. Different variables would possibly produce different results as there would be a different sequence of top Facebook profiles. It is uncertain how that would impact other variables.

Keywords used – names of the most common vaccines in Lithuanian and English; variations of "covid" in Lithuanian and English, variations of "opportunity passport" in Lithuanian and English:

AstraZeneca, Vaxzevria, Zeneca, Zeneka, "AZ vakcina", CanSino, Convidecia, Ad5-nCoV, Covaxin, BBV152, "Bharat Biotech", CureVac, CVnCoV, Johnson&Johnson, Janssen, Moderna, mRNA-1273, Modernos, Moderna, Pfizer, BioNTech, BioNTech-Pfizer, BNT162, Comirnaty, Pfizerio, Pfizeris, Sinopharm, Vero, Sinopharm-vakcina, Sinovac, CoronaVac, SputnikV, Sputnik, sputnikas, sputniko, sputniku, sputnika, vakcina, astrutė, "galibybių pasas", "avių pasas", "avinų pasas", kovidas, covidas, kovidiotai, covidiotai, covidiotas, "Galimybių pasas", "kovido pasas".

Findings:

This report presents the top 10 most interacted-with profiles on Facebook; information includes: their ties to the government, ownership, anomalies with interactions, page/post "likes", etc. These profiles were compiled by searching for the above-mentioned keywords in public posts.

- Lrytas.lt privately owned media outlet of Lithuanian origin. One of the oldest continuously running newspapers in Lithuania. Interaction rate and page followers correlate. Total posts – 487; Interaction rate – 0.07%; Verified profile;
- 2. LRT.lt state-sponsored media outlet. Lithuanian legal code ensures independence and autonomy from any political party or movement. Recently have been accused of left-leaning bias by various right-wing groups; strongly supports governmental vaccination programmes and processes. Interaction rate and page followers correlate. Total posts – 505; Interaction rate – 0.08%; Verified profile;

DELFI.It – privately owned media outlet, parent company is the Estonian group AS Ekspress Group. Curates various myth and disinformation busting programmes. Publishes various

(including right and left leaning authors) opinion pieces. Supports governmental vaccinations programmes and processes. Interaction rate and page followers correlate. Total posts – 519: Interaction rate – 0.04%; Verified profile:

- 1. 15min.lt privately owned media outlet, parent company is the Estonian group MM Group. Curates a fact-checking initiative. Recently accused of left-leaning bias by various right-wing groups. Supports governmental vaccination programmes and processes. Interaction rate and page followers correlate. Total posts 536; Interaction rate 0.03%; Verified profile;
- 2. TV3 Televizija privately owned media outlet, parent company is the Lithuanian group All Media Baltics. Interaction rate and page followers correlate. Total posts 462 Interaction rate 0.04%; Verified profile;
- 3. Lietuvos Respublikos Sveikatos Apsaugos Ministerija Ministry of Health of the Republic of Lithuania, a core institution responsible for the implementation of the vaccination process in Lithuania. Provides information about vaccines. Interaction rate and page follower's correlate. Total posts 178 Interaction rate 0.35%; Verified profile;
- 4. Sputnik Lietuva: Baltijos Naujienos Russian state-sponsored media outlet, designated by Lithuanian and other NATO/EU governments as spreading propaganda or being a "Russian perspective" tool. Numbers indicate aggressive and active attempts to disrupt public opinion. Interaction rate and page followers do not correlate. Total posts 6,171; Interaction rate 0.2%; NOT Verified profile; Anomalies observed low number of page followers; disproportionate number of interactions, page followers and total posts.

- 5. Ciniškas Chirurgas Facebook public profile owned by a private individual/individuals. Strongly advocates vaccination processes. Interaction rate and page followers do not correlate. Total posts 9; Interaction rate 9.42%; NOT Verified profile; Anomalies observed low number of posts with keywords, substantial number of page followers.
- 6. Kas Vyksta Kaune privately owned media company focused on local Kaunas city news. Most often reports news regarding vaccination processes; advocates for vaccination. Interaction rate and page followers do not correlate. Total posts 92; Interaction rate 0.15%; NOT Verified profile; Anomalies observed low number of posts, substantial number of page followers.
- 7. Respublika.lt privately owned media company of Lithuanian origin. Most often reports critically on governmental actions, slightly suspicious of the vaccination process in Lithuania. Interaction rate and page followers do not correlate. Total posts 83; Interaction rate 0.58%; NOT Verified profile; Anomalies observed low number of posts with keywords, substantial number of page followers.

Page Name		Total Interactions	Interaction Rate	Total Posts	Video Views	Post Performance	Page Followers
$[l_{\mathbf{r}}^{\mathbf{z}}]$	Irytas.lt •	168,592	0.07%	487	242,462	2.2x	531,453
un	LRT •	166,030	0.08%	505	152,632	1.8x	416,526
D	DELFI.lt 🥏	134,842	0.04%	519	257,814	1.8x	590,649
15	15min 🕏	118,039	0.03%	536	628,388	2.1x	629,829
3	TV3 televizija 🕏	84,102	0.04%	462	500,965	1.8x	433,593
8	Lietuvos Respublikos sveikatos apsaugos ministerija 🤊	51,092	0.35%	178	325,803	2.0x	83,147
tr	Sputnik Lietuva: Baltijos naujienos	45,972	0.2%	6,171	639	-3.7x	3,477
*	Ciniškas Chirurgas	41,540	9.42%	9		19.5x	48,969
<	Kas vyksta Kaune	34,609	0.15%	92	11,541	1.5x	248,797
R	Respublika.lt	26,462	0.58%	83		1.8x	54,886

Conclusions

The first six Facebook profiles did not include any anomalies — interaction rates, page followers and post number correlate. The first five Facebook profile are mainstream media in Lithuania (Irytas, DELFI, 15min and TV3 Televizija are privately owned, LRT is state media). The sixth profile belongs to the Lithuanian Ministry of Health, which strongly supports and proactively informs about the vaccination process. The next four (Sputnik Lietuva, Ciniškas Chirurgas, Kas Vyksta Kaune, Respublika.lt) profiles did include anomalies — Sputnik has been aggressively pushing its nar-

rative about vaccinations; the other three profiles included anomalies partly related to the specific set of keywords (this could be solved using a different/bigger set of keywords) and through the use of different variables (e.g. focusing on total posts or page followers). This report concludes, that from the top 10 most interacted with profiles, one profile is directly financed and managed by Russian Federation and most often spreads critical, negative, or outright disinformation messages using the Sputnik Lietuva profile.

Recommendations:

- Using a broader set of keywords (connected to vaccination process)
- Use of different variables (e.g. total posts or page followers). This would allow to check if total interactions would correlate with other variables.
- Analysing the context and posts to find underlying messages e.g., negative, positive, neutral/informative use of emotions. This analysis will be conducted in the next reports.
- Closer look at profiles using languages of ethnic minorities in Lithuania. This would help to identify narratives that are more common in non-Lithuanian speaking circles.

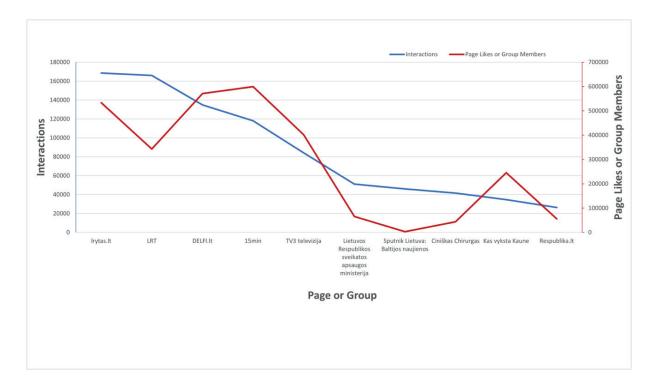


Chart represent anomalies e.g. Sputnik – insignificant number of Page Likes, significant number of interactions.