

CHALLENGE DESCRIPTION – #MAKESOCIALMEDIAFAIRAGAIN!

Hello!

We have prepared an awesome challenge about the social media platforms use by financial institutions and financial influencers. We well know this is your natural environment and we hope to see your creativity!

What's the problem...

As you know social media platforms are the main channel of communication for companies and financial institutions as well as stakeholders including consumers.

Surely you already have seen various contents promoting financial products many times. Facebook, Instagram, LinkedIn, Twitter are ideal places for promoting such offers. The “finfluencers” (i.e. influencers acting in financial markets) can pursue affiliate marketing practices this way. It's about promoting financial services and advice in the way which may be not aiming to help customers in decision making but is aimed to make profits for the publisher with sponsored links and posts.

The second group of individuals contributing to the social media are the supervised entities' official accounts and their employees. Ensuring transparent and legally compliant communication between financial institutions and stakeholders is one of duties of the Polish Financial Supervision Authority (KNF). Each case of incompliance shall be sent to the KNF's database for verification and taking appropriate further investigations.

...and create the solution

Your task is to create the tool gathering online posts published by the individuals related to supervised entities and by the influencers promoting financial products. Another step is to verify the compliance of the contents with the KNF's guidelines and the applicable law, then conduct the initial verification of its compliance and finally transfer it to the KNF's analyst for further verification.

Expected features of the tool

The tool should work on the basis of an imported file containing registration data of supervised entities (publicly owned companies, pension funds, brokers etc.) and it should capture the posts published from accounts of supervised entities, their employees and financial influencers - via the API provided by the social media platform. Another step is to develop your solution utilising elements of advanced analytics/AI (e.g. NLP, Computer Vision) and performing initial classification of (in)compliance of the published contents (together with screenshots or video files) for further verification by the KNF's employee. The tool should be able to learn to classify (in)compliant content according to the KNF employee's feedback information on approval or rejection of the outcome performed on the basis of automated process.

Additionally the tool should include clear and editable user dashboard containing the statistics of collected and initially verified data as well as data filially verified by the KNF's analyst.

We provide:

1. Examples of social media posts and multimedia supporting training your model;

2. The document of Position of the Polish Financial Supervision Authority on social media use by supervised entities and their employees;
3. Elements of the KNF's campaign warning of influencers;
4. The list of supervised entities' to import.

Areas of development:

- Frontend
- Backend
- Artificial Intelligence (i.e. Computer Vision, Natural Language Processing)
- Large data-sets visualisation

Technicalities:

I. WEB APPLICATION (priority+)

1. SDK environment

- JavaScript / Typescript
- React / Next.js
- Docker (optionally)

1. Data visualisation - DASHBOARD

- list of posts view
- linking to original screenshot in the entry view in the dashboard,
- statistics view (the number of entries of each entity etc.)
- suspicious posts' alerts (based on the bag of words)
- top finfluencers' list with filtering feature (H6,H12, D1, W1, M1) H-Hour / D-Day / W-Week / M-Mouth
- global metrics

II. BACKEND (priority ++):

1. SDK environment

- Node.js / Python / Golang
- TensorFlow / TensorFlow.js
- Docker (optionally)

2. Functionality:

- verification of social posts' compliance with the guidelines UKNF
- entry validation feature,
- Computer Vision,

- NLP,
- REST API for communication with the frontend,
- entering suspicious posts to the database
- front update

III. MODEL (priority ++)

- **sentiment analysis based on Google library,**
- NLP for classifying posts and comments,
- image/infographics recognition,
- identifying logos and corporate identity of payment institutions in the background of the video