

Rock Internet Blues: what's new since 2020?

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Our participation in the "Social Media and Digital Services: Business, Innovation, Sustainability" Seminar, organized in Geneva by the UNESCO Chair of the University of Strasbourg and the University of Geneva, is an opportunity to take stock of developments since the 2020 release of "Rock Internet Blues"¹.

We will try to identify the positive and negative developments with regard to the themes covered in this article.

Positive developments

- Awareness of the problems posed has made its way in society:
 - First, the themes dealt with, in particular the risks posed for democracies by the evolution of the Internet, information and communication technologies and social networks, have become significant and occupy more and more the traditional and digital media and academic publications.
 - On the other hand, this is less true of the analysis elaborated, which made the financing model based on advertising and the personal data of users as the essential factor which caused all the socio-economic and political drifts of the Internet. However, this analysis, referred to as data economy, appears more and more frequently today in expert publications, even if it is not yet disclosed to the general public².
 - Our work, which globally challenged the civil society sector of Internet governance for its myopia towards the sector of Technological Giants (TGs) in the gestation period of this evolution (2010-2014), had been poorly received by many colleagues; since then, more and more of them share, in one way or another, the vision of the article, even if their expression is less sharp.
- Concrete answers are beginning to be provided, in particular from the European Union (EU):
 - TGs are increasingly under the critical eye of European authorities and very structured measures have been taken to control user data: the European Data Protection Regulation (GDPR) has become an essential measure for the TGs and, for the first time, the EU has taken a leadership role in the world of the Internet and has equipped itself with a mechanism obliging the TGs. The regulation is combined in legislation on the digital market (DMA³), which specifically targets TGs, and legislation on digital services (DSA⁴) which brings new obligations for social network and digital platform companies.
 - The noose has also begun to tighten on the escape practices of TGs on taxation, although the path here will be long and complex; the unanimity within the EU not being acquired, the projects are slowed down and it seems that this time the solution could be global.

¹<https://funredes.org/RockInternetBlues>

² <https://onezero.medium.com/the-ad-based-internet-is-about-to-collapse-what-comes-next-48e31d648a35> One of the articles in question questions the sustainability of the current advertising-based model and refers to Tim Hwang's book, "*Subprime Attention Crisis: Advertising and the Time Bomb at the Heart of the Internet*" and that of Cory Doctorow, "How to destroy surveillance capitalism".

³https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6423

⁴<https://eur-lex.europa.eu/eli/reg/2022/2065/oj>

- Initiatives are increasingly appearing for new non-toxic and/or disruptive approaches for search engines and other applications. The question of the ethics of artificial intelligence seems to have become a priority theme for researchers and legislators. Artificial intelligence applications, like ChatGPT, could reshuffle the cards in the digital marketplace and provide opportunities for positive change, if action is taken to support such change. In this regard, there are general guidelines on the development and use of AI for EU countries, which are accompanied by the respective national strategies implemented locally.
- Various and significant fines have been imposed by the European Commission and some of its member countries on TGs for non-compliance with personal data protection rules, monopolistic practices and tax evasion, mainly⁵. The effect of these sanctions, however, does not show a major setback so far in the finances of these companies.
- Beyond the European continent, progress has been made in recent years in more up-to-date and proactive regulation for the development and use of information technology-based applications in developed countries, such as the USA, Japan and others in Asia-Pacific⁶. It is striking how the legislation being generated in Washington neutralizes the effect of the TGs' lobbies on Capitol, especially after the Senate arrests of the CEOs of these companies⁷.
- The current regulation of the development and use of computer applications to protect the interests of citizens and nations has particularly affected important companies in Latin America and Africa. The issue has risen on the socio-political agenda of countries, although its positive effects are still in the making.
- A special mention on the fact that, in several national strategies for the development and use of resources based on information technologies, including that of the European Union, what is linked to the ethical implications of these applications is explicitly treated⁸. It should also be noted that some of these strategies identify recommendations for the training of professionals in this field that encourage them to carry out their activities within the framework of socially agreed ethical parameters.
- An interesting indicator that can be associated with the extent of protection of citizens' rights in the digital age in countries that are taking steps in this regard seems to be the maturity of the development of civil society organizations. It is an event that seems to occur when organizations such as universities and NGOs free themselves from manichean patterns of analysis and reflection and open up to thinking about innovative and alternative solutions.

Negative developments

- As with global warming, even if all the causes were overcome today, a phenomenon of inertia would cause the negative consequences to continue for a significant time before the situation turns around. All the findings listed in the 2020 article (end of dialogue, egomation, increasing entropy of the

⁵ <https://www.reuters.com/technology/doj-poised-sue-google-over-digital-ad-market-dominance-bloomberg-news-2023-01-24/>A reference to recent action by the US Department of Justice against Alphabet, the parent company of Google.

⁶ <https://oecd.ai/en/ai-principles>The OECD, for example, identifies principles for using AI that respects human rights and democratic values.

⁷ <https://www.bbc.com/news/technology-54721023>Facebook, Twitter and Google face questions from US senators

⁸ <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>Ethics guidelines for trustworthy AI

Internet, etc.) not only remain true but have amplified and spread like oil to all layers of society. In the eternal tension between substance and appearance, the substance has dissolved and the appearance win the game...

- In media and political life, the substance no longer matters: what really matters is communication, that is to say the appearance, and by the way all the institutions that guarantee the foundations of democracy are weakened. A good CV is more important than a good professional. A good lawyer is no longer really the one who makes his client win the trial but the one who communicates well in the media to explain why and how justice made a mistake with his client. A leader, political or business, is evaluated on the quality of his communication, not really on the effectiveness of the policies or strategies implemented. An artist is considered more for the way he manages his production on social networks than for the aesthetic and creative criteria of his discipline.
- When the facts are no longer stubborn what becomes essential is the communication of the facts and there are no more limits and no more nuances. The scales are getting shorter: one death is a massacre and two deaths a genocide. Even for the most just causes, communication justifies the means: a sideways glance is sexual assault and heavy flirting is rape. Discussions in parliament on laws follow the same model (“you are a fascist”, “President resigns”) as well as assessments on institutions (“the police kill”, “the law is brutal.”)... The tensions increase without the actors stopping to realize that they have overlooked the possibilities for dialogue, negotiation and agreements that they have left behind.
- What used to be called “opinion generators” now, with the support of social networks, are called “influencers” and are most often motivated by advertising gains and supported by the use of bots that multiply fictitiously their relevance. The digital world is flooded with misinformation, trivial and pseudo-scientific information. The criterion of success that operates in this field is that the contents become viral, independently of their own value and the entropy of what was intended to be a universal knowledge base continues to grow, the noise making the signal even more invisible. The *discoverability* of relevant content (to escape the advertising tyranny of search engines) is becoming a priority research theme. Even Wikipedia, temple of universal knowledge, sometimes tends to favor media references over scientific ones, taking the risk of being carried away by noise in such cases.
- In such a context, the safe haven should remain science and the scientific method for which appearance is irrelevant, facts are paramount and demonstrations require rigor and replicability. Unfortunately, while the Covid crisis should have given pride of place to reactive science capable of providing solutions, the opposite has happened. A study carried out in France by the IFOP for the Jean Jaurès Foundation, in partnership with Reboot⁹ makes an absolutely pathetic observation: only 1/3 of young people think that science brings more good than harm, 2/3 of young people believe in at least one of the untruths tested in the survey (the earth is flat, the astrology is a science, the Egyptian pyramids were built by extra-terrestrials, creationism is the truth against Darwin's theory of evolution...).
- All of this underlines once again the conclusion of the original article: the absolute urgency of youth digital literacy in its informational component. This does not mean, however, that this objective should be neglected in other sectors of the population. The training of the digital citizen, in his ability to be present in these media, to discern the true from the false, but also to

⁹The scientific misinformation of young people in the age of social networks (<https://www.jean-jaurès.org/publication/la-mesinformation-scientifique-des-jeunes-a-lheure-des-reseaux-sociaux/>)

recognize his rights in the digital society which is structured around information technologies and allow him to assert them.

- If we look at the regions where democracy is not threatened because it does not exist, the same inertia is at work. China has surpassed the worst imaginable Big Brother schemes with facial recognition at work from birth to the grave and is even trying with pandemic fear or abroad to prolong surveillance of its citizens. Russia goes with apparent success in disinformation audacity to paint a unilaterally decided and totally factual military aggression in defense against an attack, and this despite the fact that Wikipedia in Russian¹⁰ reports the facts and is not censored! It is no longer enough for the facts to be documented in a place free from suspicion, the propagandist account of the facts has the last word in the face of an uneducated public to process the information.

Since the meeting, an exceptional event has invaded the information space, impacting the environment far beyond the populations of information professionals: the appearance of new disruptive tools that have emerged amid the developments of generative artificial intelligence. This time, these are resources based on large language models (LLM), with ChatGPT, being the first to be released by OpenAI, the best-known tool in a large family of tools that continues to grow.

The era that opens, with this historical emergence and the complex ethical questions it raises, confirms the analyzes and warnings of the reference article and its recommendations, in particular on the necessary regulation of the giant companies in the sector and the support for awareness-raising activities. aimed at citizens in general, as well as the developers and users of these resources.

It is extremely unique, in the history of computing, to see the main promoters of new technological developments publicly show their concern, even their anguish, about the possible negative implications of their products and "cry out" for the need to regulate their own creation. What is questionable is proposing that the required regulation be defined only by large technology companies.

It is also extremely significant that [the important work from Elon University](#), which questioned several hundred experts in the field about their vision for AI in 2040, shows the following ratios (personal elaboration):

Utopian vision of the future of AI by 2040: 15%
Dystopian vision of the future of AI by 2040: 38%
Ambivalent vision of the future of AI by 2040: 46%

It is evident that experts in the field are calling for strong regulation of their sector of activity. A point that confirms that the academic and civil society sectors must be a relevant part of the working groups on the regulation of the development and use of AI.

¹⁰[https://ru-m-wikipedia-org.translate.goog/wiki/Вторжение_России_на_Украину_\(2022\)?_x_tr_sl=auto&_x_tr_tl=en](https://ru-m-wikipedia-org.translate.goog/wiki/Вторжение_России_на_Украину_(2022)?_x_tr_sl=auto&_x_tr_tl=en)