

THREE YEARS OF THE EAA'S YOUNG ACOUSTICIANS NETWORK IN SOCIAL MEDIA

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ABSTRACT

Science communication and interaction with the broader research community have become increasingly important over the last years. Social media, hereby, has become an essential tool. In recent years, acoustic organizations have also started using social media within their communities. In this work, the board of the EAA's Young Acousticians Network (YAN) shares their experience and thoughts on using various social media platforms (Twitter, LinkedIn, Facebook, Instagram, and Discord) to build an international, online, self-organized community where people could stay informed about job offers and events and share their knowledge and expertise. Different social media platforms are used for different purposes, and insights from the analytic data acquired from them are used to better understand the needs of the community.

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1. INTRODUCTION

In recent years, more and more acoustic organizations have taken to social media to connect, share information and interact with their members or audiences. A quick search on Instagram with the keyword "acoustic" shows that this is not limited to companies working in acoustics, such as consulting firms or headphone manufacturers, but also to research groups and non-profit organizations such as the European Acoustics Association (EAA), the Acoustical Society of America, the acoustics group at Salford University, the DEGA's JungeDEGA, or the EAA's Young Acousticians Network (YAN) to name a few. These organizations use Instagram to share job offers or information about events, interesting snippets into their work, or to advertise their research. These and other organizations are also present on other social media platforms such as LinkedIn, where they also engage with their audiences in a form that best suits the social media platform.

The YAN's use of social media started in 2013 with the creation of a Facebook group and a Twitter account.







Since 2020, the YAN board has allocated more resources to developing its social media presence and to create an online community for acousticians. In this paper, the current board of the EAA's Young Acousticians Network share how they have evolved their social media platforms to engage with early-career acousticians since 2020.

It should be noted that members of the YAN board volunteer their time and effort to support the greater community of early-career acousticians. As such, the progress made with social media and the chosen approaches depended on members' availability. For this reason, this paper should not be read as a scientific paper, in which goals are approached in the most efficient way, but rather as a candid communication to share the YAN's journey and progress with social media. The YAN board hopes that by sharing this information, other organizations may find some inspiration for their own social media channels. With this in mind, this paper shares the goals of the current YAN board for their social media, the type of content which was created, and a reflection of what worked, what did not work, and what could work, all of which depend on an organization's goals.

2. WHY: GOALS OF THE YAN IN USING SOCIAL MEDIA

When the current YAN board started their term in 2020, they set a few goals to direct their work. One of these goals was helping acousticians and non-acousticians to know more about acoustics and activities in the field of acoustics. There were also additional reasons for the YAN board to reactivate its social media accounts:

- to keep acoustics relevant;
- to build an online acoustics community; and
- to share our passion for acoustics with others.

Achieving these goals could be summed up as communicating with people. At the time, the YAN already had a monthly newsletter to share job offers, conference deadlines, and some pieces of acoustic news for the newsletter subscribers. This newsletter has been a product of the YAN since 2011 and still is, with about 800 subscribers. With its clear content structure, its monthly release and neat design, readers of the newsletter know exactly which information they will find and when they can expect to get it. The limitations of these characteristics are that information sometimes

had to wait a month before being sent out and that information which does not suit the newsletter cannot be easily added. A different way of communication was therefore needed to complement the newsletter.

To reach these goals, the YAN board decided to dedicate more time to social media, which offers the possibility to:

- reach more people, including people who are not already familiar with the YAN;
- reach people more often: posts can be shared weekly or multiple times a week instead of only monthly;
- 3. reach people more easily: by making posts shorter, bite-size pieces of content, it easier to create a post than to build a whole newsletter;
- 4. allow more interactivity in our communication.

As most of the YAN's target demographic is between 18 and 40 years of age, it was assumed that most of them would be users of social media and that they could be reached via one social media platform or another.

It is worth noting that, a year after starting to become active on social media platforms, the YAN board decided to prioritize people already working in, studying or otherwise familiar with acoustics over people who were not familiar with acoustics, as these two groups have different needs. This choice further influenced the choice of content which was created and shared on social media platforms.

3. DESCRIPTION OF THE SOCIAL MEDIA PLATFORMS USED BY THE YAN

The following social media platforms were used: LinkedIn [3], Instagram [4], Twitter [5], Facebook [6], and Discord [7]. Each of these platforms differs slightly from the other. Discord especially sets itself apart from the others, as it is primarily a communication platform designed to create communities. In contrast, the others emphasize social networking, content sharing, and engagement in various contexts. In addition to these five platforms, Buffer ([8]) has been used since April 2021 to coordinate and schedule posts on LinkedIn, Instagram, Twitter and Facebook. These platforms are briefly described below.

3.1 Instagram

Instagram prioritizes visuals, with people using it to share images or videos. It is also possible to use hashtags







to help users who do not "follow" the YAN account to discover it.

3.2 Facebook

Facebook makes it possible to connect with others in a variety of ways, such as with status updates, sharing images, videos, or articles. It also offers the possibility to create groups and pages to build communities.

3.3 LinkedIn

LinkedIn is a professional networking platform designed to connect people with colleagues, potential employers, and industry professionals. It focuses on career development and industry news. Here, users typically share articles, updates, and job postings.

3.4 Twitter

Twitter is used for short, concise messages. It enables quick sharing of news, updates, and opinions. Compared to Instagram and Facebook, visuals play a smaller part. Similar to Instagram, it is possible to use hashtags and trending topics to help with content discoverability.

3.5 Discord

Discord is designed primarily as a communication platform to create communities centered on shared interests. The section of Discord used by a community is called a Discord server. On Discord, it is possible to create voice and text channels in which people can communicate via video or voice calls or by text. These channels can be organized by topic or purpose, making it easier to navigate the server and have focused conversations. It also offers the possibility to assign roles and permissions to users, automate tasks, and integrate third-party applications to enhance server functionality. One negative point for Discord is that some schools and universities limit its use on their networks, because it is frequently associated with the gaming community.

3.6 Buffer

Buffer is a social media management platform which, as the name states, is used to manage accounts on different social media platforms from one centralized place. Using Buffer, users can schedule the publishing of posts on different social media platforms and analyze the metrics of each account.

4. STRATEGIES USED BY THE YAN

The social media platforms used by the YAN can be divided into two groups based on how they are used. The first group, which includes LinkedIn, Twitter, Instagram and Facebook, is used mainly to share information with the acoustics community in one-way communication, for example, to let people know about some news or job offers. Of course, comments and messages to the YAN board via the platforms are possible and replied to. However, the YAN board's focus on these platforms is not to foster discussions between acousticians but to share information with the community. The second group, which is only Discord, aims to foster an active online community of early-career acousticians that can help each other on various topics.

4.1 LinkedIn, Twitter, Facebook, Instagram

As mentioned earlier, the goal of this group of social media platforms is to share information with the public. This section covers the content of the posts which were used to date, how they were created, and how they were published.

4.1.1 Creation of posts

The posts were created by the YAN board. Depending on the post, the information had to be gathered prior to creating and publishing the posts.

In 2020, the YAN board had three of its four members dedicating time to its social media, in addition to their other YAN responsibilities. With time, this was formalized with the creation of a Social Media Manager, whose responsibilities include managing the YAN's social media. The Social Media Manager collaborates with other YAN board members, for example with the YAN's Digital Design and Illustration Manager, and with other organizations, such as the Brazilian YAN, to create and share content.

4.1.2 Content of posts

The posts created and shared by the YAN board can be divided into different groups based on their theme. Below is a list of groups of posts the YAN board has used in the past:

 "Did You Know" posts, which share snippets of interesting acoustic facts, such as the effect of noise pollution on health;







- "TC Introductions" posts, which introduce people to the role of the EAA Technical Committees (TC);
- "Get To Know" posts, which introduce people to members of the YAN board and to earlycareer acoustician networks in other countries;
- "Acoustics History" posts, which share short biographies of famous or influential acousticians;
- "Acoustics Worldwide" posts, which introduce people to the work perspective in acoustics in different countries by asking earlycareer acousticians about their experiences. For example, according to one such acoustician, Italy has a lot of acousticians working as freelance consultants;
- informational posts, such as for job offers, conferences, or the start of the YAN mentoring program.

Some examples of the content the YAN generates for social media is shown in Figure 1.



Figure 1. Examples of YAN social media content

4.1.3 Publishing schedule

The schedule is organized on a monthly recurring schedule using a combination of topics described in Section 4.1.2. The posts were scheduled for publication

on all social media platforms simultaneously. This coordination was done using Buffer, which was introduced in Section 3.6. In 2021, the YAN used a free subscription account which was limited to three social media platforms. To benefit from Buffer's analytics reports and engagement tool and coordinate posts to LinkedIn, Instagram, Facebook and Twitter, the YAN subscribed in 2022 to a paid "Essentials" subscription with a 50% discount for non-profit organizations.

Since 2022, the publishing schedule has been arranged in order to include both regular posts and informational content. An example of the first was the campaign named "TC introductions". For this series, at least 3 posts per month were published and dedicated to a specific EAA TC in order to introduce both the chairs and vice-chairs of the different TCs as well as to introduce different research areas in acoustics to earlycareer acousticians. On the other hand, informational posts do not follow a specific schedule and such content is published across the different channels depending on the need to inform the community about an imminent event or a close deadline for a certain job offer. In 2023, with the setup of a dedicated social media committee which comprises of the social media manager and two external members, the posting schedule adopted in 2022 has been maintained while new content has also been developed.

Overall, the frequency of publications and possible delays was and is subject to the availability of the members involved in it.

4.1.4 Results and discussion

To look at how well the use of social media helped the YAN board reach its goals, some metrics can be defined. To track how many people are interested in the YAN's content, the number of followers is analyzed. It would also be possible to track the engagement (likes, shares, comments, reactions) of people to posts and other metrics. However, for the purpose of providing a general overview of our community's growth, only the changes in the number of followers and their demographics are presented.

Figure 2 shows the evolution of the number of followers on each platform across time, sampled once per day. The sharp increase in the Instagram line in January 2022 is due to the absence of data from Buffer for the period before, even though the Instagram account already existed. From the figure, it can be seen that the number of followers on each platform increased at a steady rate. From the steadiness of the increases, it can be assumed







that they are unrelated to the publication of any specific post or newsletter. This makes sense since it is expected that posts shared by the YAN board would mostly be seen by people who already follow the YAN on social media and new people are reached only when they start to follow the YAN on social media. This only happens when new early-career acousticians hear about the YAN, which happens by word of mouth. If a rapid increase in followers is wanted, then more engagement with the YAN posts would be needed so that the algorithms of the social media platforms show them to more nonfollowers of the YAN, and the internet abounds with information on how to make this happen.

Looking at the trends, the fastest-growing social media accounts are on Instagram and LinkedIn. This could be because more of the target audience of the YAN is on these platforms than on Twitter or Facebook.

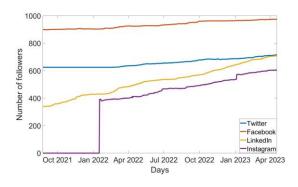


Figure 2. Evolution of the number of followers on each platform across time

Figure 3 shows the age groups of people following the YAN on Instagram and Facebook as of April 19th 2023. This information is not available on Twitter or LinkedIn. As expected, there are more people following the YAN on Facebook than on Instagram for each age group. For Instagram, most of the people following the YAN are between 25 and 34 years of age, while on Facebook, this ranges from 18 to 44 years of age. Overall, it would seem that YAN is reaching the respective age group for its target audience.

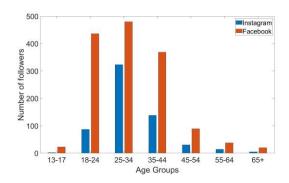


Figure 3. Age groups of people following the YAN on Instagram and Facebook as of April 19th 2023

According to [1], 60% of Instagram users are between 18 and 34 years of age. This is the expected age group of most early-career acousticians. In contrast, only 40% of Facebook users are within that age group. Even then, it is the authors' experience that people within that age group are not active on Facebook, except to join groups of some sort, such as to find housing in a new city. As for LinkedIn, since it is a platform for professionals and the YAN is an organization for professionals and people interested in the profession, it is not surprising that people on LinkedIn would gravitate towards following the YAN.

Figure 4 and Table 1 show the number of followers of the YAN Instagram and Facebook accounts as of April 19th 2023, divided into EAA-member and non-member countries. The information for Twitter and LinkedIn is not available. The list of EAA countries can be found on the EAA website [2]. From the data, it can be seen that many followers are also from outside the EAA.







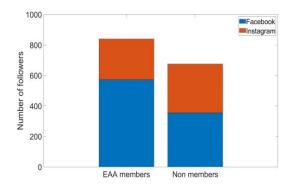


Figure 4: Number of followers from EAA member countries and non-member countries as of 19th April 2023

Table 1: Number of followers on Facebook and Instagram from EAA member countries and non-member countries as of 19th April 2023

	Facebook	Instagram	Total
EAA	572	268	840
members			
Non-	355	320	675
members			
Total	927	588	1515

Figure 5 shows the number of followers on Instagram and Facebook for the 10 countries with the most total followers, as of 19th April 2023. This information is based on the IP addresses of users of these apps. From Figure 5, it can be seen that many of the followers are actually from outside the EAA, namely Brazil, Chile, Argentina and Mexico. One possible reason could be that these countries lack an acoustics organization which is aimed at early-career acousticians. Since some of the posts shared by the YAN are relevant to anyone involved in acoustics, not just those in the EAA, then they could be interesting to people outside of the EAA. In the case of Brazil, the large number of followers could also be due to the collaboration between the YAN and Brazilian YAN for social media, especially since the Brazilian YAN is more active on Instagram than on Facebook, having, as of 19th April 2023, 465 followers on Instagram.

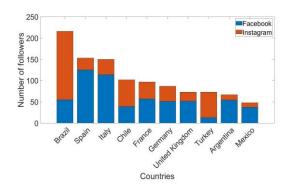


Figure 5: Number of followers on Instagram and Facebook for the 10 countries with the most total followers as of 19th April 2023

There were also some non-measurable benefits to the YAN board's last three years with social media. One such benefit was that the YAN board could touch on topics they could not address in the newsletter. These topics are the topics described in Section 4.1.2. In doing so, the YAN board has also gathered a library of information and posts that can be reused in the future, such as with the History posts, making it easier to create new content for social media. Furthermore, with input from the Digital Design and Illustration Manager, the YAN board now also has a nicer-looking template for its posts.

4.2 Discord

Discord is used by the YAN board to create an online community of acousticians. The goal is for acousticians across the world to be able to exchange ideas and help one another. The server is open to other acoustic societies for use should they wish to use it with their members.

4.2.1 Structure and use

Currently, the YAN Discord server is organized as a series of text channels categorized by theme. There are currently five categories which are open to users.

- "YAN Inside", in which people can share job offers, the YAN newsletter, and in which the YAN board communicates with the boards of other national young acoustician networks (such as B-YAN in Belgium for example);
- 2. "YAN Community" in which people can ask and give help on any acoustics-related







question, such as looking for a specific paper or looking for online databases, highlight workshops and events, or introduce themselves;

- "Software" with different channels for different software such as COMSOL or RAVEN, where people can ask for and give software-specific help;
- "Conferences" for conference-specific topics, such as for grabbing a beer during a conference;
- "N-YAN communities", where members of national societies can talk about national society-specific topics in the language of their choice.

Other than these categories, there is a "YAN Board" category, which is only visible to the YAN board. The categories can be seen in Figure 6.

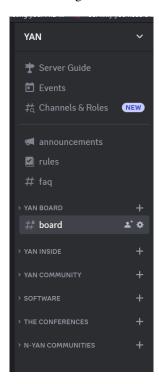


Figure 6: Categories on the YAN Discord server

4.2.2 Results

Currently, no analytics are available for the Discord server. The server currently has 471 members, and

analytics are only available for servers with at least 500 members.

Based on the board members' experience, the Discord server was supportive in many ways: people have asked for help and received help, such as shown in Figure 7. It has also been used to organize getting a beer at Euronoise/BNAM 2022.

At the current state, it is not a very active community, which is normal for a young platform that is only 3 years' old: people are not used to using it yet, and there are currently not enough incentives for a regular user to visit the Discord server other than when they need help. Nevertheless, it has been used more in 2022 than in 2021 or 2020, and activities are being planned to make it more attractive.

Once the analytics are available, and since the goal of the YAN board with Discord is to build an online community, the following metrics could be interesting to investigate:

- the number of people on the server;
- how fast someone gets the first answer to their question;
- how fast a question finds its final answer, and whether the answer was helpful to the person asking the question;
- the number of different people actively participating on the server or engaging with any of its content.



Figure 7: Screenshot of some interactions on the help channel







5. CONCLUSION

In this paper, an overview of how the YAN board has utilized its social media platforms between 2020 and 2023 was given. On LinkedIn, Facebook, Instagram and Twitter, the YAN board seems to be reaching the expected audience: early-career acousticians in EAA countries. Furthermore, the YAN is also reaching early acousticians in non-EAA countries. For Discord, plans are underway to increase the activity on it.

Based on the YAN board's experience, the authors would suggest to anyone interested in using social media platforms that whatever strategy they use should be aligned with the organization's goals. If the goal, as in the case of YAN, is to share information, then doing what the YAN did might be enough. If the goal is to increase the visibility of the organization on an international scale, make acoustics more popular for younger audiences or increase awareness of the science of acoustics in the general public, then the approach should be similar to that of any company trying to raise awareness about their brand. If the target demographic does not consist of researchers but rather of the general public, then it becomes even more important to present the information in an interesting way. This entails skills which are not necessarily developed as a researcher. Here, the role of appealing visuals becomes extremely important. Interesting experiments, exciting video beautiful illustrations, and captivating storytelling, all of these would be extremely valuable to bring acoustics to the masses, and video sharing platforms such as YouTube are full of science-oriented videos with several millions views which could serve as examples.

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