



ModeratorHub: A Knowledge Sharing and Relationship Building Platform for Moderators

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ABSTRACT

This design project arose with the purpose to intervene within the current landscape of content moderation. Our team's primary focus is community moderators, specifically volunteer moderators for online community spaces. Community moderators play a key role in up-keeping the guidelines and culture of online community spaces, as well as managing and protecting community members against harmful content online. Yet, community moderators notably lack the official resources and training that their commercial moderator counterparts have. To address this, we present ModeratorHub, a knowledge sharing platform that focuses on community moderation. In our current design stage, we focused 2 features: (1) moderation case documentation and (2) moderation case sharing. These are our team's initial building blocks of a larger intervention aimed to support moderators and promote social support and collaboration among end users of online community ecosystems.

CCS CONCEPTS

• **Human-centered computing** → **User interface design.**

KEYWORDS

Content moderation, volunteer moderators, online community, knowledge sharing, collaboration

ACM Reference Format:

Jirassaya Uttarapong, Yihan Wang, and Donghee Yvette Wohn. 2024. ModeratorHub: A Knowledge Sharing and Relationship Building Platform for Moderators. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '24)*, May 11–16, 2024, Honolulu, HI, USA. ACM, New York, NY, USA, 6 pages. <https://doi.org/10.1145/3613905.3650775>

1 INTRODUCTION

Content moderation, which is the contextualization, management, and upkeep of online content and spaces in order to protect social media users from online harm, is key to online ecosystems [9, 14, 18]. Such ecosystem operates as follows: Online communities are virtual social spaces where individuals connect on common or related grounds [12]. Participation in online communities involves various contributions through actions such as knowledge sharing and active engagement [8]. These community spaces may also be centered around figureheads (i.e a streamer, or an influencer) [13, 23]. These

figureheads thus fall under what we refer to as "community leaders", who are those who take the lead in the cultivation of the culture, policies, and guidelines of their respective communities [10, 11, 13]. These online community spaces and said guidelines make up the general collective expectations of "acceptable behavior", which vary from community to community accordingly, and are known to be up-kept by moderators, or "mods" for short [6, 15, 17, 24].

The landscape of content moderation is a mixed approach encompassing moderation technologies (i.e automated moderation systems, third party bots, A.I) and the human moderation element. There are two types of human moderators: commercial moderators and volunteer moderators. Commercial moderators typically adopt a more objective and rule-based approach, prioritizing consistent enforcement of established policies and guidelines as enforced by the overseeing companies that employ them [9]. In contrast, volunteer moderators operate independently. Volunteer mods often exhibit a more nuanced and community-oriented approach, incorporating the context and motivations surrounding users' actions into their decision-making. Extant literature suggests that platforms moderated by volunteer users tend to be significantly more transparent than commercially moderated platforms [21].

Situated uniquely compared to their commercial moderator counterparts, volunteer mods are often unpaid, not formally trained, and lack formal resources. Yet, given the structure of online community spaces, volunteer mods are prevalent as many online communities rely on them to operate successfully. This can be seen as certain social platforms, examples of such include Twitch and Discord, operate with the importance of volunteer moderators in mind, even encouraging and defining their key roles in platform resources based around how to run a "community" [5, 17, 24]. As the spotlight falls on volunteer moderators to facilitate online communities, it is important to also view volunteer mods as a user group in need of broader community considerations and better avenues of resources, communication, and collaboration. We build upon prior research regarding how volunteer moderators interact, operate, and collaborate as we design ModeratorHub [5, 6, 24].

We focus two features in our base design of ModeratorHub: (1) moderation case documentation and (2) moderation case sharing. We engaged in brief customer discovery as we began designing what we intend in the future scope to be a hub focused on community moderation. ModeratorHub is centered on community moderators as our primary end users, but is also a space intended for use by community leaders (i.e content creators, influencers) and general users (i.e active community members) as secondary end users. This platform aims to be a designated space to promote collaboration alongside strengthening the connections, transparency, and resources among moderators and related roles, all of which make up the ecosystem of user-run online community spaces.

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CHI EA '24, May 11–16, 2024, Honolulu, HI, USA
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ACM ISBN 979-8-4007-0331-7/24/05
<https://doi.org/10.1145/3613905.3650775>

2 RELATED WORK

2.1 Online Communities

The current landscape of online ecosystems involves social media platforms that act as hosts to many online communities or micro-community spaces within them [13]. These online community spaces are social spaces and take forms such as Facebook groups, Discord servers, group DMs, Reddit forums, to name a few [17, 24]. They are formed around common grounds and interests, for individuals to connect and relate to one another. These common interests may be related to gaming, hobbies, art, or may be a celebrity or online figurehead. Community leaders are individuals who often cultivate the creation and the culture of their respective communities. These community leaders may be those who founded a particular community space that is interest based, or may even be a streamer or influencer who facilitates their community space surrounding themselves as the common factor [10, 11]. To upkeep, manage, and combat against online harm, content moderation is required within these online community spaces. Content moderation may refer to automated moderation or third party bots, but also importantly refer to human content moderators [6, 23, 24].

Content moderators are those who review posts and general content in order to ensure that they do not violate the website's terms and policies or cause harm to users in the space [4, 7, 19]. The two types of content moderators are commercial and volunteer. Commercial moderators are contracted and thus are paid and employed by platforms. The role of commercial mods often involve sorting through, defining, and deleting various content that is posted throughout platforms. Volunteer moderators are independent of this sort of system, although they operate somewhat similarly in that the shared goal involves the management and removal of online content as necessary [9].

Policies and guidelines can refer to the terms of service of a respective platform, but can also refer to user generated (community leader or moderator generated) listed expectations and definitions of what is considered acceptable or relevant behavior in community spaces. As such, many communities are often kept in line through the use of general community etiquette and pre-written rules. This is generally enforced or looked over by volunteer moderators. The primary goal of a moderator is to keep an online community safe [22]. When it comes to the daily task of an online community moderator, most involve handling inappropriate behavior, as well as banning and warning as need be. Amongst the many challenges, many online platforms offer an array of helpful tools for community moderators. For instance, Facebook group's system that allow community moderators to approve or reject certain requests to be a part of said community spaces [22].

2.2 Volunteer Moderation

Volunteer moderators are significant in online communities and their moderation. Moderators are often appointed by a community leader, such as a content creator or a founder of a community. Beyond the distinction between paid and volunteer moderators, two other key concepts further differentiate commercial and volunteer moderation: centrality and transparency [9]. Volunteer mods are closer to average community member users than commercial mods, and are thus more directly accessible and personally involved. Much

information has already been documented on online volunteer moderation in regards to protocols, practices, and general routine for online moderators [5]. On top of that, much has already been noted on the wide variety of certain issues regarding content moderation and what moderators deal with, showing contexts of this role to be especially challenging, such as for those volunteering in live streaming communities with a rapidly growing user-bases [23, 24].

The role of community moderators is of clear importance and acknowledged by various social platforms. For instance, Twitch's automated moderation guides consider and are designed with volunteer moderators in mind [3]. Discord similarly highlights within their safety and moderation guide, "moderation recruitment" [1]. These guides act as a briefing on moderators and how to select them, even defining their role as "[to] ensure that the chat meets the behavior and content standards set by the broadcaster by removing offensive posts and spam that detracts from conversations". Furthermore, automated moderation tools native to platforms actually are designed with volunteer moderators in mind, as they are intended to review and double check these systems [1–3, 9, 20].

Notably, moderators operate by engaging in collaborative efforts to uphold moderation democracy [5]. In live streaming communities, moderators seek to avoid a dictatorial approach and opt for discussions with fellow moderators to reach a clear and concise consensus. In instances where a moderator finds it challenging to make final decisions, seeking a "second opinion" from other moderators becomes a valuable practice [5]. The way in which moderators coordinate with each other also must fall in line with community dedicated rule sets and the general norms of a community [5]. Though, in a broad online community, such as the live streaming platform Twitch and its many smaller sub communities, community behavior, rule sets, and moderator coordination will vary extensively [24]. Moderators typically adapt to the existing methods, which often involve immersing a newly-appointed moderator into the system without comprehensive training, relying on their natural caution to prevent significant disruptions. Some moderators consciously emulate the judgment and actions of their peers, while others seek support by engaging in discussion groups [16].

Volunteer moderators' role within the online community ecosystem are clearly acknowledged by platforms that facilitate said online communities and micro-communities [1–3, 9, 20]. However, these guides and resources are less often directed to the moderators themselves, but more so towards users like community leaders. Furthermore, volunteer mods lack the official guides and resources enforced onto commercial mods by their employers. If platforms functionality and culture are designed around and dependent on moderators, volunteer moderators should be better addressed and more prioritized. Thus, we aim ModeratorHub to assist volunteer moderators in (1) case documentation, to be an information logging tool for mods, and in (2) case sharing, to share knowledge and experiences.

3 SYSTEM DESIGN

3.1 Design Concept

Our platform, ModeratorHub, is intended to address a lack of design consideration towards the broader community of volunteer

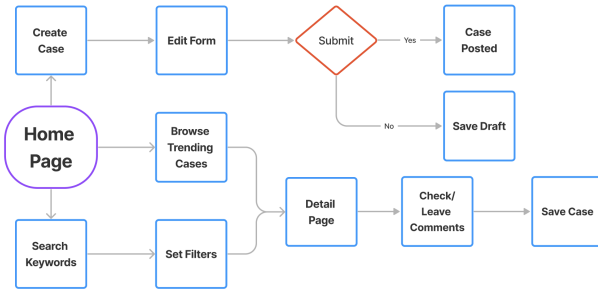


Figure 1: user workflow for ModeratorHub

community moderators for various online community spaces. This user group lacks dedicated spaces and community facilitation. Our aim, in future scope, is to create a community moderator hub. To begin the building blocks of designing this, we identified key problem points for volunteer moderators, and distilled our two current design focuses from these.

The key problems we identified are summarized as follows: Given the diverse norms of different communities, moderators need to collaborate to develop community rules [5]. Moreover, there is a need for dedicated spaces solely focused on case experiences. The varied ways of documenting cases pose a challenge, making it difficult for moderators to extract key information from differing case documentation. On top of these challenges, many moderators undergo emotional tolls in their roles as well [24]. Establishing connections with others who share similar identities can provide a more profound support, understanding, and recognition of their work. While moderators have small discussion groups for the communities they moderate, these conversations are often confined to these small groups. Connecting with moderators beyond their immediate group remains a challenge, limiting their information sources. Furthermore, new mods always have barrier to entry to learn how to make decisions as a volunteer mod when they are not familiar with strategies.

Thus, we focused on these two initial features, which are (1) case documentation and (2) case sharing and interaction, aiming to facilitate information sharing and interaction functionalities. Our team worked in Figma to begin design work of the platform, wire-framing, in its current stage, through the form of a mobile application. This process involved iterative refinement in accordance to feedback and information gained through our customer discovery interviews consulting community mods, leaders, and members. The utilization of a uniform case record template enables moderators from various communities to easily comprehend and manage their respective cases. By fostering a culture of sharing and discussing different problem-solving approaches, the platform also bridges the gap in cross-platform communication. This collaborative environment significantly enriches their moderation resources. Also, tag-based searching significantly improves the efficiency in locating related cases.

3.2 Feature 1: Case Documentation

ModeratorHub’s case template allows moderators to efficiently document moderation cases through standardized forms. These forms are designed to prompt for key details as well as for uploads of any key materials (i.e chat messages, images) related to the case. The aim of case documentation allows moderators to keep track of and record their cases and experiences. While this may be used solely for archival reasons, this feature also gives the option for moderators to publicly share to the platform, where other moderators can access and interact with these cases.

From the homepage, a user of our platform can choose to either browse cases or create a new case of their own to document. As such they are prompted to title the case. Next, our platform prompts the user to identify the case type, choosing from drop-down options: individual, group/ collective, and/or anonymous. The template then prompts the user for the platform(s) that encompass the moderation scenario, the violator(s), the victim(s), and a description. The prompt for this also reminds users to be mindful to anonymize case details for privacy and safety reasons. The next prompt involves the moderators’ action(s) taken, also presented as a multi-choice dropdown, with options such as: delete the post, block account, educate, etc. The multi-choice dropdowns (case type, platform, actions taken) also allow the user to enter their own field to account for any options not available in the initial prompt. Details and context to the moderators’ actions taken, as well as their decision making reasons are the next two free-text prompts. The template ends with tags/ keywords to include with the moderation case, the option to hide the moderators’ name to anonymize their case, any links or media uploads to attach to the case, and lastly the options to submit the case right away or to save as a draft.

3.3 Feature 2: Case Sharing & Interaction

Improving cross-platform communication and consideration is accomplished by granting access to other moderators’ cases. Also, transparency in report flows is heightened through the sharing of moderation case records, where moderators provide insights into their decision-making processes. Given the diverse norms in micro-communities, which may differ from the platform’s aggregated guidelines and terms of service, moderators can discern similarities within their online communities and extract valuable insights from shared cases. Encouraging interaction among moderators, users can engage with various cases to further promote communication and exchange knowledge.

In the homepage, users can browse trending cases. Also they can search for cases based on content, with options to order results by time, or popularity. In the search result page, users can use filters based on harassment types, case types, and/or platforms, facilitated through tags on the page. Then they can check the details of the case.

In the detailed view of each case, users can access comprehensive information, including harassment type, case type, platforms, as well as specific details like violators, victims, case descriptions, actions taken (such as education or blocking), and the reasoning behind each decision. Then users can check or leave comments and engage in discussions on each case page. Acknowledging the value of certain cases for moderators’ learning, we provide a ‘save case’

Table 1: Demographic Information of Interviewees

Participant #	Age	Race	Gender	Role	Platform(s)
P1	22	Black	Man	Moderator	Discord
P2	21	Asian	Woman	Moderator	Discord; Twitch
P3	20	White/Asian	Man	Moderator	Discord; Twitch
P4	26	Black	Man	Moderator	Discord; Twitch
P5	N/A	N/A	N/A	Moderator	Discord
P6	25	White	Non-Binary	Moderator	Discord; Twitch; Reddit
P7	21	White	Woman	Moderator	Discord; Instagram; TikTok
P8	25	White	Non-Binary	Moderator	Discord; Twitch
P9	23	N/A	Man	Community Member	Discord; Twitch
P10	22	Asian	Non-Binary	Community Member	Discord; Twitch
P11	26	Hispanic/White	Man	Community Leader	Discord; X; Instagram; Youtube
P12	25	Hispanic	Man	Community Leader	Discord; Twitch; X

feature. Moderators can curate a personal list of insightful cases, which remains private to a user and cannot be viewed by other users. These features collectively aim to create a robust and user-friendly environment for moderators to enhance their strategies and share insights within the community.

4 METHODS

Our team aimed to converse with community moderators, members, and leaders to better inform us on key pain points surrounding community volunteer moderators, as well as to gain a better grasp on our base features' usefulness to community moderation as a whole. We recruited community moderators who moderated for various communities on the internet. We also recruited community members who had strong opinions on the moderation process, as well as community leaders who were closely involved with community volunteer moderators. Participants were recruited through Discord, Reddit, X, and via email and interviews were conducted virtually via Discord voice call.

The interview guides initially involved sections and questions related to participant role background (moderation background, community leader background, member background, and activity). Our team asked questions to gain a better understanding of the cases they moderate, what harassment they face, and their moderation practices as well as related tools and technologies that facilitate these practices. These interviews did not consist of showing participants mock-ups of our hub at this stage. After creating the skeleton for the protocol, it was modified to include a section of design-focused questions. Moderators were asked to give their opinions on moderation technologies and resources, to inform us further on our current focused features and broader design goals.

5 RESULTS

Participants in our customer discovery interviews identified various problem points they experience in their roles. These points included lack of sufficient dedicated resources and tools for moderation, which was in line with prior work. Interviewees mentioned notable specifics such as lack of tools for verification of users and for dealing with high volume traffic. Furthermore, moderator interviewees discussed struggling to compartmentalize and manage

their emotions in their moderation roles, whether it be compartmentalizing their empathy for bad actors or dealing with paranoia that moderating may put them in situations that may be dangerous to their mental and/or physical health. Interviewees highlighted also experiencing harassment due to their role as a moderator (i.e., verbally harassed for enforcing community guidelines). Another key problem point identified were situations in which fellow moderators may not see eye-to-eye in collaborative decision making scenarios.

When asked about what other technologies or resources were used to assist with moderation practices, interviewees spoke to using 3rd party features available such as bots and chat-loggers. In terms of keeping track of moderation cases, participants either did not do so, or they did so using means such as Google Docs or Sheets, which some felt "aren't the best" (P8). However, participants stated feeling that having more accessible or effective avenues to document moderation cases would be useful. In terms of content documented, participants mentioned information factors such as usernames, platform IDs, chat messages, and behaviors across multiple platforms. Even if a problematic behavior happens on one singular platform, for instance, moderators and leaders mentioned checking other social media platforms to see if the perpetrators were escalating or speaking towards the case. As such, participants highlighted the usefulness of being able to track, through community collaboration, wrong-doers who may return or act as repeat offenders cross-platform and/or through multiple aliases.

However, risk factors were also brought to our team's attention in terms of safety and privacy concerns that were not initially anticipated in our beginning iterations of our platform's design. While our design involves moderation case documentation and sharing, some interviewees were concerned about how much in-depth information our case templates would be prompting from and sharing to users.

There were multiple safety concerns regarding divulging identifiable information surrounding the poster (the moderator), the victim(s) (community members or leaders) involved in the case, as well as the perpetrators (also community members). Interviewees expressed concern for moderator well-being. Notably, P7 shared a key specific concern regarding if a moderator were to make a

poor decision in a case shared. P7 was specifically concerned that, if a mods case were identifiable in enough aspects, whether that would open up avenues to further harassment to the moderator or others involved. This participant was concerned about the line between harassment of this nature versus constructive criticisms or comments. Our team made slight adjustments to our case documentation template as such, asking for less identifiable information in the template's prompts as well as a toggle for the moderator user to post the case anonymously or not. But we acknowledge there is further work and consideration to be done in line with these safety concerns.

While we followed up after these changes to question moderators regarding anonymity to mitigate certain risk factors, risk factors regarding anonymity were also brought to our attention. While some interviewees felt having the anonymity option would provide a sense of protection, there were worries raised by others around this feature being abused. There were concerns regarding abusers using anonymous case posting to target victims or get ahead of victims and moderators. There were also concerns regarding the reputability of anonymously posted cases, although there were mixed opinions on this. Some felt the anonymous feature would not affect the credibility of moderation cases documented, but some did.

6 FUTURE WORK & DIRECTIONS

ModeratorHub is currently in its early design stage, with two current focused features: (1) moderation case documentation and (2) moderation case sharing. The broader scope of our design is intended to address the lack of collaboration support and dedicate spaces for community moderators, despite them holding key roles. In our future goals to promote collaboration and strengthen the connections, transparency, knowledge and resources, we aim to benefit moderators as well as all related roles within the ecosystem of user-run online community spaces.

In the future development of the platform, a key aspect to focus on is enhancing the ability to coordinate catering to moderators' specific learning needs by filter attributes. Offering various avenues for moderators to narrow down and pinpoint the exact information they are seeking will be instrumental in optimizing their experiences.

One prospective feature could involve algorithmically processing and digesting the content uploaded by moderators, particularly their moderation cases. This could lead to the platform recommending other users who are engaged in similar or relevant searches and operations. In the long term, this feature has the potential to be exceptionally useful, creating a dynamic and interconnected network of moderators sharing insights and experiences.

While the platform may start with a relatively small number of users, it is also crucial to anticipate its growth. As the user base expands, there may reach a point where there exists an overwhelming amount of information to sift through. Therefore, the platform should evolve to include either an improved or very effective search system and a recommendation system. Ensuring that users can efficiently access relevant content will be essential for maintaining the platform's utility and effectiveness as it continues to grow and diversify.

Our interviews brought to our attention potential safety concerns and risks. Going forward, our team must leverage both sides of received feedback, (1) the usefulness of sharing and tracking specific problem users with (2) protecting the privacy of individuals involved. Ultimately, there is no concrete way to 100% predict and account for all risk possibilities of user behaviors at this stage and thus we must proceed into our future work with current feedback and concerns gathered in mind, and look to gain further insights.

ACKNOWLEDGMENTS

We would like to give thanks to Mike Gabriel Ayson, Choina Vincent, and Mohammad Azaharul Islam.

This research was supported in part by National Science Foundation grant no. 1928627.

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