

Investigating User Experience Gaps in Live Streaming: A Study of Twitch's Interface and Workflow Challenges with Recommendations for Improvement

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I. Abstract

This thesis explores user experience challenges in Twitch's live streaming platform, focusing on streamer workflows, viewer engagement, interface design, and community building. By conducting qualitative research through in-depth interviews with streamers from two different cultural contexts, the study identifies critical pain points and provides actionable recommendations to enhance the platform's usability and inclusivity.

Key findings highlight inefficiencies in streamer workflows, such as heavy reliance on third-party tools, time-intensive setup processes, and frequent technical issues. Viewers face limited discoverability features, inadequate interactive tools, and accessibility challenges, including unreliable captions and insufficient multilingual support. The rigid design of Twitch's interface further hinders both streamers and audiences, limiting customization and engagement opportunities.

To address these issues, the research proposes a user-centred redesign of Twitch's interface. Recommendations include the development of native streaming tools, real-time monitoring features, enhanced discoverability mechanisms, and modular dashboards. The study also advocates for improved accessibility and integrated community-building tools to foster stronger connections between streamers and viewers.

This work contributes to the field of Human-Computer Interaction (HCI) by demonstrating how user-centred design principles can improve complex digital platforms. While focused on Twitch, the findings offer broader implications for optimizing live streaming interfaces in similar contexts. Future research should build on these insights by testing the proposed solutions in diverse user groups and exploring their scalability across other platforms.

II. Introduction

1. Overview

Live streaming has swiftly emerged as a pillar of digital entertainment, fundamentally transforming how audiences engage with content (Kang et al., 2021). Its rapid rise over the past decade has been driven by significant improvements in internet infrastructure, the widespread availability of affordable, high-quality video equipment, and an increasing appetite for real-time, interactive experiences. Unlike pre-recorded videos, live streaming creates a dynamic and personal connection between creators and their audiences. Through features like real-time chat, polls, and other interactive tools, it fosters immediacy and authentic engagement, offering viewers a sense of participation and creators a chance to connect directly with their communities (Lata, 2021).

Live streaming platforms have evolved globally to meet a wide range of interests and audiences. Major players like YouTube Live and Facebook Gaming have expanded their ecosystems to incorporate live content, while platforms such as DLive and Trovo cater to more niche communities. This growth highlights live streaming's widespread appeal as a medium for entertainment, education, and fostering connections. In 2021, the industry's market value exceeded \$70 billion (Custom Market Insights), with forecasts predicting steady and substantial growth in the years ahead.

Twitch has established itself as a dominant force in live streaming, thriving within gaming and creative communities alike. Since its launch in 2011, the platform has grown from a niche space for gamers to broadcast their gameplay into a vibrant hub for diverse content, including art, music, and the increasingly popular “Just Chatting” streams. Attracting over 31 million daily visitors (Britannica) and hosting millions of active content creators, Twitch has revolutionized how audiences engage with live content. Its interactive features—such as live chat, emotes, and subscription options—have transformed passive viewership into active participation, cultivating a dynamic and tightly-knit community of streamers and viewers.

Despite its success, Twitch faces growing challenges that accompany its rapid expansion. As the platform evolves, its increasingly complex interface has become a pain point for both viewers and streamers (Harpstead et al., 2019). Viewers often struggle to navigate the overwhelming array of features, which can detract from their experience. Meanwhile, streamers face the daunting task of managing their workflows, relying on multiple tools and integrations to engage their audience effectively. These difficulties highlight the pressing need for a user-centred redesign that meets the changing needs of Twitch's diverse and dynamic community.

2. Scope

This research addresses critical gaps in the usability and functionality of Twitch's interface by focusing on insights gathered through direct interviews with streamers. By prioritizing the lived

experiences of those who interact most closely with the platform, the study aims to bridge the gap between viewer and streamer needs, creating a platform that is intuitive, inclusive, and effective for its diverse user base. The significance of this research lies in its potential to:

- **Understand User and Streamer Challenges:** Through in-depth interviews with streamers, this research uncovers frustrations and challenges in their workflows. By grounding findings in firsthand accounts, the study ensures the redesign addresses real-world issues rather than relying on assumptions or surface-level trends.
- **Enhance User Engagement:** Incorporating streamer feedback identifies barriers that hinder viewer interaction. Addressing these barriers can streamline the user experience, making it easier for audiences to navigate streams, interact with features, and build meaningful connections. An intuitive platform fosters deeper engagement and encourages active participation.
- **Streamline Streamer Workflows:** Streamers often juggle complex workflows involving multiple tools and platforms. This research prioritizes simplifying these processes by addressing inefficiencies and bottlenecks, enabling creators to focus on delivering high-quality content.
- **Balance Viewer and Streamer Needs:** While streamers and viewers often have differing priorities, this study seeks to balance these perspectives by exploring common ground. The goal is to create a cohesive experience that benefits the entire community while respecting the unique needs of each group.
- **Advance Human-Computer Interaction (HCI) Research:** From an academic perspective, this research contributes to HCI by demonstrating how user-centered design principles can address real-world challenges in live streaming. Insights from this study can inform interface design in similarly dynamic and complex environments.
- **Foster Community and Inclusivity:** An inclusive platform accommodates users of varying technical abilities and experience levels. By emphasizing clear navigation and accessible features, the study aims to lower barriers to entry and foster a sense of belonging for all participants.

By addressing these areas, this research has the potential to make a meaningful impact on the live streaming industry, enhancing the experiences of streamers, audiences, and the platform. The findings will not only inform Twitch's development but also serve as a blueprint for improving user-centred design in other interactive domains.

3. Aims & Objectives

The primary aim of this research is to enhance Twitch's live streaming interface by integrating insights from direct streamer interviews. The study seeks to find common ground between diverse user needs and improve the platform's usability for both viewers and creators.

3.1 Objectives

1. **Conduct Streamer Interviews:** Gather detailed insights from streamers to understand the challenges they face in managing broadcasts and interacting with their audience.
2. **Identify Common Issues:** Pinpoint recurring concerns by analyzing feedback from streamers, ensuring the redesign addresses shared challenges effectively.
3. **Balance Conflicting Perspectives:** Investigate areas where viewers and streamers have differing needs or expectations, aiming to design solutions that balance these perspectives.
4. **Suggest Collaborative Redesign:** Recommend design changes that integrate streamer feedback, fostering a platform that feels intuitive and inclusive for all stakeholders.
5. **Contribute Practical Insights:** Offer actionable recommendations for applying user-centred design principles to address the challenges of live streaming interfaces, providing a real-world case study for similar platforms.

By achieving these objectives, this research aims to improve Twitch's usability and functionality, contributing to the broader discourse on optimizing digital tools for dynamic and growing communities.

4. Structure of the thesis

1. Introduction

The Introduction chapter sets the stage for redesigning Twitch's live streaming interface, with the goal of improving user engagement and streamer workflow efficiency. It outlines the motivation behind the project and introduces the main research objectives.

2. Literature Review

The Literature Review examines relevant research on live streaming interface design, user engagement, and streamer workflow. It highlights existing challenges within Twitch's platform and identifies gaps in the current literature that this project aims to address.

3. Methodology

The Methodology section outlines the approach used to gather data, including interviews with streamers and viewers, and thematic analysis for the interface improvements. It provides a clear framework for how the research was conducted.

4. Findings

The Findings section presents insights from the data collected, including the key pain points faced by streamers and viewers. It identifies the areas of the Twitch interface most in need of improvement, such as cluttered dashboards, lack of interactivity, and insufficient community-building tools.

5. Recommendations

Based on the findings, the Recommendations section proposes specific changes to the Twitch interface, including a more streamlined dashboard for streamers, enhanced viewer interaction features, and improved tools for community-building. These changes are designed to address the identified pain points and improve overall user experience.

6. Conclusion

The conclusion summarizes the project's key objectives and outcomes.

III. Literature Review

The rapid evolution of live streaming has reshaped digital entertainment, making platforms like Twitch central to how audiences consume content and interact online (Johnson, M.R. et. al 2019). However, as the demand for live streaming grows, the design of these platforms must adapt to meet the needs of both viewers and streamers. This literature review examines existing research on user engagement, streamer workflow challenges, and the role of user-centred design (UCD) in live streaming interface redesigns. It also identifies key gaps in the literature and highlights areas for further exploration.

1. User Engagement

Engagement is a crucial factor in the success of live streaming platforms. Research by Liu et al. (2022) emphasizes that interactions between streamers and their audiences, as well as among viewers, foster a sense of community and connection, which are key to sustained engagement. Similarly, Todd and Melancon (2017) argue that the immediacy and interactivity of live streaming create a level of connection that traditional media cannot achieve. Features like real-time chat and polls enable viewers to actively participate in content, transforming them from passive consumers to active participants (Lin et al., 2021).

Emotional dynamics also play a significant role. According to Lin et al., the emotional states of broadcasters can influence viewer engagement, with positive emotions like happiness fostering increased interaction and support (Lin et al., 2021). Guo et al. (2021) add that trust within live streaming communities strengthens engagement, suggesting that interface design should include mechanisms to build and maintain trust. However, while these studies provide valuable insights, they often overlook the nuances of how interface features might better cater to diverse audience demographics or manage the sheer volume of interactions during popular streams.

2. Streamer Workflow Challenges

For streamers, managing a live broadcast is complex and often requires juggling multiple third-party tools and integrations. This fragmentation can detract from their ability to focus on creating quality content. Kang (2023) highlights that Twitch's current interface lacks cohesion, forcing streamers to rely on external software for essential functions. Similarly, Zhang and Gu (2023) suggest that an integrated, user-friendly interface could improve streamer efficiency and satisfaction, ultimately enhancing viewer retention.

Streamers also face challenges related to audience engagement and monetization. Xu and Zhang (2022) note that the competitive nature of live streaming places economic pressure on streamers, further complicating their workflows. These findings underscore the need for a design approach that reduces technical barriers and allows streamers to prioritize their content. However, existing research rarely addresses the specific features or tools streamers would find most beneficial, leaving a gap in practical, actionable recommendations.

3. Community Building and Inclusivity

Community dynamics are central to the success of live streaming platforms. Yuan and Lee (2022) argue that fostering social capital within streaming communities helps build trust and collective efficacy among users. Interactive features like chat and viewer polls not only enhance engagement but also contribute to a sense of belonging. Lum (2023) emphasizes the importance of social presence in driving user participation, suggesting that platforms should prioritize features that enhance this perception.

Inclusivity is another critical aspect of community building. Ariessaputra (2022) points out that complex interfaces can deter new or less tech-savvy users, limiting the platform's reach. While many studies discuss the importance of inclusivity, few explore how live streaming platforms can better accommodate users with diverse abilities or those new to the medium. For example, research into the experiences of streamers with visual impairments (Jun et al., 2021) highlights significant gaps in accessibility design, an area that remains underexplored.

4. User-centred Designs (UCD) in Interface Redesigns

The application of UCD principles is essential for addressing the challenges faced by live streaming platforms. Nguyen et al. (2021) advocate for designing systems based on user needs and preferences, emphasizing that this approach can improve both usability and satisfaction. Lin et al. (2021) further argue that emotional engagement should be a core consideration in design processes, as it directly impacts user experience.

Despite these insights, there are notable shortcomings in existing research. Many studies focus on high-level principles without delving into the practical aspects of implementing UCD in live streaming interfaces. Additionally, the reliance on third-party tools for specific functionalities remains a persistent issue that has not been adequately addressed. While Chen et al. (2021) discusses the importance of integrating tools within a unified interface, their findings lack specificity, leaving a gap for further exploration.

5. Shortcomings in Existing Research

While the current body of research on live streaming platforms provides a robust foundation for understanding user engagement, streamer workflows, and interface design, several critical gaps and shortcomings remain. These issues hinder the development of more comprehensive and practical solutions, particularly for platforms like Twitch, where both viewers and streamers interact in complex, dynamic ways.

1. **Accessibility and Inclusivity:** Although inclusivity is widely acknowledged as a priority in interface design, research in this area is often surface-level and lacks depth. Most studies address inclusivity in terms of general usability improvements, such as simplifying navigation or clarifying interactive features. However, there is little exploration of how live streaming platforms can cater to specific needs, such as:

- a. **Users with Disabilities:** While some studies mention accessibility, few offer practical solutions for users with visual, auditory, or motor impairments. For instance, streamers with visual impairments often face significant barriers when navigating streaming tools or managing chat interactions, as highlighted by Jun et al. (2021). Similarly, viewers with hearing impairments may struggle to engage with content lacking captions or other assistive features.
 - b. **New and Non-Tech-Savvy Users:** Many potential users are deterred by complex interfaces, especially those unfamiliar with the technicalities of live streaming. Research does not adequately address how to lower these barriers to entry, leaving an untapped audience that could benefit from a more intuitive design.
- 2. Implementation of User-centred Design:** While many studies emphasize the importance of UCD principles, there is a noticeable lack of actionable frameworks for implementing these ideas in live streaming platforms. Current research often highlights the benefits of UCD in broad terms—improved usability, better user satisfaction—but fails to provide:
- a. **Clear Methodologies:** Few studies outline how user feedback can be systematically collected and analyzed, particularly from platforms like Reddit, which hosts vast amounts of unstructured data.
 - b. **Adaptability for Diverse Use Cases:** The variability in user behavior and streamer workflows suggests that a one-size-fits-all approach is insufficient. However, there is limited exploration of how customizable interfaces could address the diverse needs of users and streamers.
- 3. Reliance on Third-Party Tools:** Streamers often rely on external tools for essential functions like screen recording, automating actions, and monetization. This reliance creates fragmented workflows, forcing streamers to manage multiple platforms simultaneously. While studies acknowledge this issue, they fail to explore:
- a. **Effective Integration Strategies:** Research does not adequately address how third-party tools could be integrated into the core interface without compromising usability or performance.
 - b. **Impact on Streamer Productivity:** There is limited exploration of how these fragmented workflows directly affect streamers' ability to focus on content creation and audience interaction.
- 4. Large-Scale User Interactions:** The unique challenges of managing large audiences during live streams, particularly on platforms like Twitch, are often overlooked. For example:
- a. **Crowd speak and Chat Dynamics:** As Ford et al. (2017) note, the rapid growth of chat sizes on popular streams creates a unique communicative form that fosters engagement. However, research does not delve deeply into how interfaces can better manage and organize these interactions, ensuring that messages remain coherent and meaningful for both viewers and streamers.

In conclusion, existing research provides valuable insights into live streaming platforms, but significant gaps remain in areas such as accessibility, UCD application, tool integration, and large-scale user interactions. Addressing these shortcomings is essential for creating a more inclusive, efficient, and engaging platform that meets the diverse needs of viewers and streamers alike. By focusing on these underexplored areas, this research aims to contribute practical solutions that bridge these gaps and elevate the live streaming experience for all stakeholders.

IV. Research Design and Methodology

This research adopts a qualitative exploratory approach to investigate the multifaceted challenges faced by Twitch streamers in engaging their audiences and managing their workflows (Duncanson, E., 2024). The study focuses on uncovering gaps in interface usability, streamer workflow efficiency, and audience engagement, with the ultimate aim of offering actionable recommendations for improvement.

1. Research Design

The study is grounded in semi-structured interviews as its primary data collection method, complemented by observations of streamer setups and workflows (Hamilton, W.A., et al, 2014). This design facilitates a detailed exploration of both surface-level challenges and deeper systemic inefficiencies. Semi-structured interviews were selected for their flexibility, enabling participants to share their experiences openly while allowing the researcher to probe specific areas of interest. This approach ensured the collection of rich, qualitative data that could capture the complex realities of streaming on Twitch. (Obreja, D.M., 2023.)

Participants were recruited from two culturally distinct regions—India and the UK—to provide a cross-cultural perspective on the challenges faced by streamers. This design decision was informed by the recognition that cultural and contextual factors significantly influence how users interact with digital platforms (Gray, K.L., 2017.). By including streamers from diverse geographical backgrounds, the study ensures that its findings reflect a broader range of experiences and are not confined to a single cultural lens.

2. Participant Recruitment and Demographics

A purposive sampling method was used to recruit six Twitch streamers, ensuring a diversity of perspectives. Participants included both emerging content creators with as few as 15 followers and moderately successful streamers with up to 13,000 followers. This range allowed the study to examine how challenges differ based on the scale of operations, from those just beginning their streaming journey to those managing larger audiences (Johnson, M.R. and Woodcock, J., 2019). Refer [Appendix](#) for participants' data.

Recruitment was conducted through direct outreach to streamers who were active on Twitch. The potential participants were identified browsing Twitch's live streams, focusing on creators with varying audience sizes. Streamers were contacted via Twitch's direct messaging feature, contacted them on Discord and Instagram, where they were provided with an overview of the study and an invitation to participate. Follow-ups were conducted where necessary to ensure clear communication and participation.

3. Data Collection Methods

The primary data collection method consisted of semi-structured interviews conducted via platforms like Discord and WhatsApp. These platforms were chosen based on participant preferences for ease of communication and familiarity. Each interview lasted between 30 and 60 minutes, with some sessions split into multiple parts to accommodate participants' schedules. During the interviews, participants were encouraged to share their experiences with Twitch's interface, highlight specific pain points, and discuss their strategies for engaging audiences and managing workflows.

To supplement the interviews, participants were asked to demonstrate their streaming setups (Archibald, M.M., et.al 2019). This involved showcasing their equipment, such as cameras, lighting, microphones, and software, and explaining how they use these tools during live streams. This observational component was conducted via video calls, during which participants shared their screens or used their cameras to provide a virtual tour of their setups. This real-time demonstration allowed the researcher to gain a practical understanding of how the physical and digital aspects of streaming influence workflow efficiency.

In some cases, participants were also asked to describe recent challenges or successes they encountered while streaming. These anecdotes provided contextual insights into the day-to-day realities of being a Twitch streamer, helping to ground the study in concrete examples.

Study Objective(s)	Data Collection Method	Analysis Method
Identify challenges in user engagement and workflow efficiency.	Semi-structured interviews (30-60 mins)	Thematic analysis of responses to extract insights.
Explore streamer and viewer perspectives on interface design.	Semi-structured interviews and observations	Categorization of feedback into actionable themes.
Provide recommendations for interface redesign.	Synthesis of interview and observation data	Prioritization of themes to develop design insights.

Summary of data collection methods

4. Research Questions

The study is guided by the following questions:

1. How do streamers interact with their viewers, and what challenges do they face in fostering engagement?

This question delves into the dynamics of streamer-audience interactions, which are vital for the success of a stream. Engagement is a key factor in building a loyal viewership, and understanding the challenges faced by streamers helps pinpoint where improvements can be made, both on Twitch itself and in the tools available to enhance these interactions (Zhao, K., Hu, Y., et.al 2019).

2. What inefficiencies exist in streamers' workflows, and how do they address them using third-party tools?

Streamers frequently turn to external tools to manage content, interactions, and performance due to the limitations of Twitch's native features. This question seeks to uncover workflow inefficiencies and how streamers compensate by integrating third-party tools (Sjöblom, M. 2019).

3. What are streamers' perceptions of Twitch's interface design, including its accessibility, customization, and discoverability?

The interface is central to streamers' daily operations, impacting their workflow, engagement with viewers, and the overall success of their streams (Mangum, W.G., 2016). This question explores how streamers perceive Twitch's design in terms of accessibility, customization options, and the ease with which potential new audiences can discover their streams.

4. What improvements do streamers suggest enhancing Twitch's interface for both users and creators?

Streamers, being the primary users of Twitch's interface, have valuable insights into what works and what doesn't. This question aims to capture their suggestions for enhancing the platform to better serve both content creators and their audiences.

These questions are chosen to capture the full spectrum of streamers' experiences and challenges, focusing on both user engagement and workflow efficiency. They provide a comprehensive lens for identifying pain points and gathering actionable insights from streamers to inform future platform improvements.

5. Data Recording and Transcription

All interviews were audio-recorded using Apple's Voice Memos tool to ensure clear and reliable documentation of participant responses. The recordings were transcribed manually using Microsoft Word, a process that allowed the researcher to maintain the accuracy and contextual integrity of the data. Manual transcription also provided an opportunity for the researcher to engage closely with the data, noting subtle details such as tone, hesitations, and emphasis.

To further enhance the quality and coherence of the transcripts, audio editing tools were employed to clarify any indistinct sections. Transcripts were reviewed multiple times to ensure that all relevant information was captured accurately.

Cross-Cultural Insights

A key strength of the research design is its inclusion of participants from India and the UK, enabling the study to capture both universal challenges and those that are culturally or contextually specific. For instance, differences in internet infrastructure, audience expectations, and cultural attitudes toward streaming may influence how streamers in each region experience and navigate Twitch. (Recktenwald, D., 2018.)

The study also explored how regional variations in audience demographics impact engagement strategies. For example, streamers from India reported challenges related to balancing multilingual content for diverse audiences, while UK-based participants highlighted issues with fostering community interaction in smaller, niche categories. Some of the streamers in India had frequent power cuts and have had to restart their streams, compared to the ones in the UK without such issues. These cross-cultural insights added depth to the findings, demonstrating the diverse ways in which it affects user experience. (Chalaby, J.K. and Plunkett, S., 2021)

6. Data Analysis

Thematic analysis was employed to identify recurring patterns and themes within the data. This approach involved three key stages: open coding, axial coding, and selective coding. The process was iterative, ensuring a comprehensive understanding of the data.

6.1 Open Coding – Initial Exploration of the Data

In this stage, the transcripts were reviewed line by line to identify recurring concepts and ideas. This step involved a meticulous examination of explicit challenges and implicit patterns mentioned by participants. No idea was dismissed, as even seemingly minor observations often revealed significant insights.

Example Codes Identified:

"Chat clutter during busy streams"

"Challenges in viewer discoverability"

"Reliance on third-party tools like OBS"

"Limited dashboard customization"

These initial codes formed the foundation for the next stage of analysis.

6.2 Axial Coding – Seeking Connections Between Themes

Axial coding involved organizing the open codes into broader categories by examining relationships between them. This step revealed the interconnected nature of the challenges faced by streamers.

Categories Identified:

Viewer Engagement: Issues such as poor discoverability and limited interaction tools were grouped under this category.

Workflow Efficiency: Challenges like reliance on OBS and stream setup complexity were linked to inefficiencies in streamer workflows.

Interface Design: Themes like lack of customization and accessibility limitations were consolidated into this category.

This stage uncovered how these challenges were interrelated, providing a deeper understanding of the systemic issues within Twitch's interface.

6.3 Selective Coding – Refining and Prioritizing Key Themes

The final stage involved refining and prioritizing the key themes that aligned with the research objectives. Selective coding distilled the broader categories into core themes, ensuring the analysis remained focused and actionable.

Final Themes:

Viewer Engagement: Challenges with discoverability, chat management, and interaction tools.

Workflow Efficiency: Dependence on third-party tools and complexity in stream setup.

Interface Design: Limited customization options and inconsistent accessibility features.

Community Building: Lack of tools for engagement outside live streams.

Stream Health Monitoring: Need for real-time alerts and performance metrics.

These themes formed the basis for identifying user requirements and providing actionable design recommendations.

7. Ethical Considerations

Informed Consent: Before participating, each streamer received a consent form outlining the purpose of the study, the procedures involved, and how their data would be used. Consent was specifically obtained for recording the interviews and transcribing them for analysis.

Anonymity and Confidentiality: To protect the privacy of the participants, their identities were anonymized using pseudonyms. All data collected, including audio recordings and transcriptions, were securely stored and accessible only to the researcher to ensure confidentiality.

Voluntary Participation: Participation in the study was entirely voluntary. No incentives were offered to ensure that participation was unbiased, and participants were free to withdraw at any time without consequence. This approach aimed to maintain the integrity of the data collection process and respect the participants' autonomy.

8. Limitations

- **Sample Size:** With only six participants, the sample size is relatively small, which may limit the ability to generalize the findings to all Twitch streamers. The experiences and challenges of the participants, though insightful, represent a narrow cross-section of the larger user base.
- **Self-Reported Data:** The data collected from interviews relies on participants' self-reports, which can be shaped by their own recollections, perceptions, and potential

biases. As a result, the findings may reflect personal experiences more than broader trends.

- **Platform-Specific Focus:** This study centres exclusively on Twitch, so its conclusions are specific to the platform and may not apply to other live-streaming services. Different platforms may offer unique features or face different user engagement challenges, limiting the broader applicability of the results.

The methodology was carefully designed to provide a comprehensive and nuanced understanding of Twitch streamers' experiences. By integrating diverse participant perspectives, real-time demonstrations, and in-depth interviews, the study offers a holistic view of the challenges faced by content creators. The use of thematic analysis ensures that the findings are grounded in the lived experiences of streamers, providing a solid foundation for proposing meaningful improvements to Twitch's interface and ecosystem.

V. Findings

This section presents the findings derived from thematic analysis of six in-depth interviews with Twitch streamers. The findings address the research questions guiding this study, exploring how streamers interact with viewers, the inefficiencies in their workflows, their perceptions of Twitch's interface, and their suggestions for improvement.

1. Viewer Interaction and Challenges in Engagement.

Challenges

1.Chat Management: Managing an active chat is one of the most persistent challenges for streamers. As one streamer stated, "Managing chat during active streams is challenging without tools like pinned messages or chat filters" (Streamer 4). When a stream attracts a large volume of messages, it can become nearly impossible to identify meaningful or important interactions. Streamers are left to rely heavily on moderators, but even they can only do so much without the right tools.

2. Discoverability: Streamers also face considerable difficulties when it comes to discoverability. All six participants in this study emphasized how the algorithm on Twitch heavily favours larger streamers, making it difficult for smaller or niche channels to gain visibility. As one streamer put it, "Getting discovered is nearly impossible unless you're playing a trending game or have an established audience" (Streamer 1).

3. Mental Health: The constant pressure to maintain high engagement levels, along with the performance metrics that are continually tracked, can take a significant toll on streamers' mental health. One participant shared, "It's hard not to obsess over the numbers, but I've learned to focus on my core community." This insight highlights how streamers are often caught between striving for growth and engaging authentically with their audience.

Recommendations from Streamers

Given the challenges identified, streamers have provided several actionable recommendations to improve their experience on the platform:

- **Enhance Discoverability for Smaller Channels:** Streamers suggested introducing a TikTok-style clip feature that could highlight key moments from streams, making it easier for smaller or niche channels to gain visibility. As one streamer recommended, this feature could be instrumental in attracting new viewers and growing an audience.
- **Improve Chat Management Tools:** Streamers called for advanced chat filtering tools, pinned messages, and message highlights to allow for more effective chat management, especially during high-traffic streams. This would ensure that meaningful interactions aren't lost in a flood of messages.
- **Develop More Interactive Features:** Streamers also noted the need for more engaging built-in interactive tools on Twitch. Many streamers currently rely on third-party tools

to facilitate polls, games, and other interactive activities, but these external tools create friction in the streaming process. Streamers suggested that Twitch should develop more robust interactive features, such as polls, games, and even betting mechanics, to provide a seamless and engaging experience for both viewers and streamers. Refer [Summary of Findings](#).

2. Inefficiencies in Streamer Workflows and Third-Party Tool Dependency

Workflow Efficiency

Challenges

1. Reliance on Third-Party Tool: Streamers consistently reported the need to rely on third-party tools like OBS, Streamlabs, and Streamer Bot for essential functions, such as managing overlays, alerts, and audience interactions. These tools are necessary for creating polished streams, but they also add complexity to the workflow. For example, Streamer 1 shared, “I wouldn’t be able to stream effectively without OBS and Streamer Bot, but setting everything up is tedious.” The setup process itself is cumbersome and time-consuming, leading to a significant inefficiency in the workflow.

Moreover, Streamer 2 explained how software updates can cause major setbacks: “Every time there’s an update, something breaks, and I spend hours troubleshooting.” This statement highlights how the frequent technical issues arising from updates disrupt streamers' preparation time and result in longer downtimes for troubleshooting, further complicating their workflow.

2. Setup Complexity: Another recurring challenge is the amount of time streamers spend on configuring their streaming environment. Tasks like setting up scenes in OBS, integrating third-party tools, and ensuring everything works together are time-consuming. Streamers often find themselves spending hours configuring their setup, which takes away from time they could be using to create content or engage with their viewers. Streamer 1 expressed, “A recent update wiped my OBS scenes, and it took a weekend to restore them,” pointing out how updates can undo all previous setup efforts, causing further delays.

In addition to technical hurdles, streamers also reported that the process of switching between different tools during a live stream could disrupt the flow of their content. As Streamer 3 mentioned, “Switching between tools during a live stream can be overwhelming and interrupts the flow.” This constant need to manage multiple applications detracts from the focus on providing a smooth, uninterrupted experience for viewers.

3. Technical Issues: Streamers also cited frequent technical difficulties, particularly with alerts and notifications. Issues like lagging alerts or failure of notifications to appear in a timely manner were a significant source of frustration. Streamer 5 said, “Lagging alerts are frustrating. Viewers donate, and I miss it because the notification doesn’t work.” These technical glitches not only undermine the quality of the stream but also create missed opportunities for interaction with the audience, especially in the case of donations or important viewer engagements.

Recommendations from Streamers

Based on the challenges outlined above, streamers provided several recommendations for how Twitch could improve its native features to enhance workflow efficiency and reduce reliance on third-party tools. These suggestions are critical for streamers seeking a more seamless and streamlined experience.

- **Native Streaming Software:** Streamers suggested that Twitch could develop its own native streaming software, which would reduce the need for external tools like OBS and Streamlabs.
- **Stream Health Monitoring Tools:** To minimize technical disruptions, streamers recommended adding native stream health monitoring tools. These tools would allow streamers to receive real-time alerts for issues like dropped frames, muted microphones, or lagging alerts.
- **Simplified Setup Process:** Finally, streamers recommended making the setup process simpler and more intuitive. Features like drag-and-drop overlays and customizable dashboards would streamline the process of setting up and managing a live stream, making it more accessible for users of all technical skill levels.

Workflow Realities

Managing a live stream on Twitch requires streamers to juggle multiple tasks and tools simultaneously, often involving third-party applications like OBS, Streamlabs, and Streamer Bot. While these tools offer essential functionality, they also add complexity to the process, requiring streamers to invest significant time and effort into managing their streaming environment.

For example, Streamer 2 mentioned using OBS for custom scenes, while Streamer 3 relied on Streamer Bot for gamified interactions. However, integrating these third-party tools requires technical knowledge and a substantial time commitment. Streamers often find themselves spending hours troubleshooting issues or configuring new settings instead of focusing on providing a smooth, uninterrupted experience for their viewers.

Key Inefficiencies

1. Time-Consuming Setup: The setup process is often the most time-consuming aspect of streaming. Streamers must configure scenes, overlays, and integrations, and any disruption—such as an update wiping out settings—can waste significant time. Streamer 1 shared, “It took me an entire weekend to reset everything after a PC update wiped my OBS scenes,” reflecting the frustration many streamers feel when updates disrupt their workflow.

2. Technical Interruptions: Another key inefficiency is the frequency of technical issues, such as delayed or missed alerts, which can disrupt the stream’s flow. These interruptions not only affect the overall quality of the stream but also take valuable time away from interacting with the audience and creating content. Streamer 5 highlighted, “Lagging alerts are frustrating.

Viewers donate, and I miss it because the notification doesn't work." Such interruptions can create negative experiences for viewers, especially during crucial moments like donations.

3. Complexity of Third-Party Tools: While third-party tools are necessary for streamers to enhance their broadcasts, the complexity of integrating these tools often creates unnecessary friction. Many streamers expressed that these tools, while effective, are not always intuitive, which can be a barrier for new or less tech-savvy users.

Workarounds

In response to these inefficiencies, streamers have developed creative workarounds to streamline their workflows. These workarounds include using pre-configured automation scripts or creating custom UIs to simplify some of the technical tasks. However, these solutions only serve to highlight the need for better integration of native tools within the Twitch platform. As Streamer 3 suggested, "If Twitch offered built-in overlays or a native bot, it would save us hours," underscoring the value of reducing the reliance on third-party tools.

In conclusion, streamers face significant challenges when managing their live streams due to the reliance on third-party tools, time-consuming setups, and technical interruptions. Addressing these challenges by offering native streaming software, stream health monitoring tools, and simplifying the setup process would go a long way in improving workflow efficiency for streamers. By responding to these pain points, Twitch could not only streamline the content creation process but also enhance the overall experience for both streamers and their viewers. Refer [Summary of Findings](#).

3. Perceptions of Twitch's Interface Design

The research revealed several key challenges that Twitch streamers face with the platform's interface design, primarily around accessibility, customization, and discoverability. Streamers emphasized that these issues significantly impact their ability to engage effectively with audiences and streamline their workflows. Below is a detailed account of the findings, including direct quotes and specific references to individual streamers.

Customization Limitations

One of the most prevalent concerns voiced by streamers was the lack of flexibility in customizing the Twitch interface. Streamers described the platform's homepage and moderation tools as rigid, impersonal, and insufficiently adaptable to their unique needs.

- Streamer 3 expressed frustration over the static nature of the homepage, stating, "It would be great to rearrange my dashboard or have a homepage reflecting my interests." This sentiment was echoed by Streamer 4, who felt that the lack of customization made Twitch's interface inefficient for managing streams, saying, "The interface feels outdated and doesn't offer the customization I need to streamline my workflow."

The inability to tailor the homepage and dashboard limits streamers' ability to create a unique and branded presence on the platform. Customization could help them prioritize the content that best represents their brand, ensuring that their pages feel more personal and aligned with their content's identity. The lack of customization options, particularly for streamers managing multiple content types, contributed to inefficiency and frustration.

Accessibility Issues

Accessibility emerged as another critical challenge. Many streamers noted that Twitch's current accessibility features were inadequate, particularly in terms of real-time captions and multilingual support.

- Streamer 5 highlighted the shortcomings of Twitch's captioning system, saying, "Captions would be a game-changer, but they're not reliable." This issue was raised by several other streamers who reported that the captions were often inconsistent, unreliable, or absent altogether. This lack of reliable captions not only affects accessibility for viewers with hearing impairments but also limits the platform's ability to cater to non-English-speaking audiences.
- Streamer 6 made a broader point about how Twitch's accessibility limitations were affecting its global reach: "Twitch is missing out on a global audience because its accessibility features aren't effective." This highlights how the platform's failure to offer multilingual captions or real-time translation options may alienate international audiences, preventing streamers from maximizing their potential viewership.

These findings indicate that accessibility is a major pain point for streamers. With the platform lacking effective real-time captioning and multilingual support, Twitch falls behind other platforms like YouTube, which are seen as offering more robust accessibility features.

Discoverability Challenges

Streamers also highlighted difficulties with discoverability, especially for smaller or niche channels. Twitch's algorithm was described as favouring larger streamers and established communities, leaving smaller channels with limited visibility.

One of the most frequent critiques came from streamers who struggled to attract new viewers due to Twitch's algorithmic bias toward popular content. Streamer 1 explained, "Getting discovered is nearly impossible unless you're playing a trending game or have an established audience." The algorithmic limitations meant that streamers were forced to rely on external promotion or direct links to their streams, rather than benefiting from the platform's internal discoverability mechanisms.

Streamers proposed several solutions to address these issues. One suggestion was to incorporate a TikTok-style clip browsing feature, which would allow smaller channels to gain exposure through viral short-form content. This type of feature could potentially allow users to

discover new channels in a way that is less dependent on Twitch’s algorithm. Refer [Summary of Findings](#).

4. Recommendations for Improving the Interface

In addition to identifying challenges, streamers also offered practical recommendations for improving Twitch’s interface, particularly in the areas of customization, accessibility, and discoverability.

- **Customization:** Streamers expressed a strong desire for more control over how their homepage and dashboard appear. Streamer 3 advocated for the ability to rearrange the dashboard, allowing streamers to prioritize the sections that best suit their content and workflow.
- **Accessibility Improvements:** Several streamers recommended enhancing Twitch’s accessibility features, including the introduction of reliable real-time captions and multilingual support. Streamer 5 proposed that better captions would significantly improve accessibility, while Streamer 6 emphasized the need for the platform to cater to a wider international audience.
- **Discoverability:** Streamers suggested the implementation of a TikTok-style clip browsing feature to improve discoverability for smaller channels.

Overall, the findings from the study suggest that streamers face significant challenges with Twitch’s interface design, particularly in terms of customization, accessibility, and discoverability. Streamers feel limited by the static nature of the homepage, the lack of flexible moderation tools, and the inadequacy of Twitch’s accessibility features. Furthermore, the platform’s algorithmic prioritization of larger streamers exacerbates difficulties in attracting new viewers, especially for smaller or niche channels.

To address these issues, streamers recommended several solutions, including enhanced customization options, more robust accessibility tools, and a new approach to discoverability through features like TikTok-style clips. These changes could improve the streaming experience for both creators and audiences, fostering a more inclusive, flexible, and engaging environment on Twitch. Refer [Summary of Findings](#).

5. Summary of findings

Summary of Findings

Theme	Challenges Identified	User Quotes	Recommendations
Viewer Engagement	- Poor discoverability for smaller channels	“If you’re not big already, Twitch doesn’t give you the tools to grow.” – Streamer 2	- Introduce a TikTok-style clips feature for better discoverability.

	- Chat overload during high activity streams	“Chat gets chaotic when more people join; I can’t keep up.” – Streamer 4	- Add chat filtering tools, pinned messages, and priority question features.
	- Limited interactive features	“I rely on third-party apps for interactivity because Twitch doesn’t offer much.” – Streamer 6	- Develop built-in interactive tools like polls, games, and channel point mechanics.
Workflow Efficiency	- Time-intensive setup processes	“Setting up OBS and overlays takes hours, and it’s even worse if something breaks.” – Streamer 3	- Introduce a native Twitch overlay editor and simplify setup with drag-and-drop functionality.
	- Dependence on third-party tools for overlays, alerts, and analytics	“I use OBS, Streamer Bot, and Streamlabs—managing all of them is a hassle.” – Streamer 1	- Create an integrated Twitch tool for overlays, alerts, and stream health monitoring.
	- Lack of real-time alerts for stream health issues	“Viewers tell me if my audio cuts out, but I need to know before they do.” – Streamer 6	- Implement real-time alerts for technical issues like dropped frames or muted audio.
	- No tutorials for new streamers	“When I started, there was no guide. Even now, Twitch doesn’t explain new features.” – Streamer 4	- Provide onboarding tutorials for new streamers and detailed guides for new features.
	- Physical setup involving multiple screens for monitoring chat, analytics, and stream configurations	“I have three screens—one for OBS, one for chat, and one for my game—it’s essential for keeping track.” – Streamer 6	- Offer more streamlined tools to consolidate multiple functions into a single dashboard.
Interface Design	- Limited customization of dashboards and homepage	“The interface is cluttered, and I can’t change anything to suit my workflow.” – Streamer 5	- Allow customization of dashboards and modular interfaces to adapt to diverse workflows.
	- Accessibility tools, like captions and multilingual support, are unreliable or absent	“Captions would help reach more people, but they’re not reliable.” – Streamer 6	- Improve real-time captions and provide multilingual support for global audiences.
	- Homepage discoverability favours large creators	“The homepage doesn’t highlight small streamers—it feels unfair.” – Streamer 2	- Redesign the homepage to feature smaller creators and niche content through personalized recommendations.

Community Building	- Lack of tools for off-stream engagement	“Discord fills the gaps that Twitch leaves, but it would be better if Twitch had built-in tools.” – Streamer 4	- Introduce built-in community tools like forums, group chats, or Discord-like servers.
	- Difficulty managing diverse audience groups	“I’d love to organize viewers into groups—some come for quizzes, others for gaming.” – Streamer 6	- Provide tools to segment and manage audiences based on interests or engagement levels.
Stream Health	- No integrated tools for real-time monitoring of stream quality	“Lagging alerts and dropped frames are things I only notice when viewers tell me.” – Streamer 5	- Add stream health monitoring tools with real-time performance alerts for issues like frame drops and connectivity problem

The findings reveal a paradox at the heart of Twitch’s design philosophy. While the platform thrives on fostering community, its technical and interface limitations often hinder deeper engagement and accessibility. The over-reliance on third-party tools signals a misalignment between streamer needs and platform capabilities, while the absence of robust discoverability mechanisms perpetuates visibility gaps.

Streamers’ suggestions underscore a fundamental shift needed in Twitch’s approach: moving from a generalized design to a modular, user-adaptive model. This shift could empower streamers to tailor their workflows and interactions, ensuring a more inclusive and engaging experience for their audiences.

These insights not only address the research questions but also provide a roadmap for future innovations in live streaming, with implications for user-centred design in the broader context of Human-Computer Interaction.

VI. Design Recommendations

This chapter evaluates the feasibility of implementing the design recommendations proposed in this study to address the challenges identified by Twitch streamers. These recommendations are discussed in light of streamer feedback, their alignment with Twitch's goals, technical feasibility, and potential limitations. The evaluation provides a reasoned argument for prioritizing certain features while critically examining why some recommendations may not be practical or necessary at this time.

1. Improving Viewer Engagement

1.1 Discoverability Tools

Streamers' Input: Discoverability was consistently identified as one of the most significant challenges. Smaller and niche streamers reported feeling “invisible” within Twitch’s ecosystem due to algorithms favouring large, established creators. Suggestions such as introducing a TikTok-style clips feature and algorithmic adjustments were widely supported.

Feasibility: High

- **Technical Feasibility:** Platforms like TikTok and YouTube Shorts have proven the effectiveness of short-form content in boosting engagement and discoverability. Twitch can leverage its existing infrastructure to create a similar feature, utilizing clips that streamers and viewers already generate.
- **Challenges:**
 - **Algorithm Design:** The recommendation algorithm must ensure equity, giving smaller and niche streamers fair exposure. This could conflict with Twitch’s existing monetization priorities, which favour high-traffic streams.
 - **Content Moderation:** Highlighting clips automatically may inadvertently feature inappropriate or low-quality content, requiring robust content moderation.

Discussion: While feasible, implementing this feature will require thoughtful algorithm design to balance discoverability across different types of streamers. Twitch will need to ensure that this system doesn’t disproportionately favour popular content, which could exacerbate existing inequalities. Regular monitoring and iterative adjustments to the algorithm will be critical to its success.

Conclusion: A TikTok-style clips feature is a high-priority recommendation that aligns with streamer needs and Twitch’s long-term goal of fostering content diversity.

1.2 Chat Management Enhancements

Streamers' Input: Managing chat was a universal challenge, particularly for streamers with high activity or interactive content. Tools like pinned messages, chat filtering, and question prioritization were recommended to improve engagement.

Feasibility: Moderate

- **Technical Feasibility:** Chat management tools, including pinned messages and keyword filtering, are standard on many platforms, suggesting that basic versions of

these features could be easily implemented. However, advanced features like real-time prioritization based on AI require significant natural language processing (NLP) capabilities.

- **Challenges:**

- AI Limitations: Real-time prioritization could misinterpret or deprioritize meaningful comments due to context ambiguity.
- Viewer Alienation: Over-automating chat management might discourage viewers from participating if their messages are consistently overlooked.

Discussion: Simpler tools, such as pinned messages or keyword-based filtering, can be rolled out as initial solutions. Advanced AI-driven prioritization tools, while appealing, should be approached cautiously to avoid unintended consequences. Twitch must also offer streamers customizable settings to ensure flexibility in how chat is managed.

Conclusion: Basic chat enhancements are feasible and highly recommended, with more advanced tools reserved for phased implementation after rigorous testing.

2. Streamlining Workflow Efficiency

2.1 Integrated Streaming Tools

Streamers' Input: Streamers frequently criticized their reliance on third-party tools like OBS and Streamlabs. They expressed a strong preference for Twitch to develop native tools for overlays, alerts, and analytics.

Feasibility: High

- **Technical Feasibility:** Twitch has the resources and expertise to develop integrated tools, particularly given its backend infrastructure.
- **Challenges:**
 - User Resistance: Many streamers have heavily invested in third-party tools and may be reluctant to switch unless Twitch's offerings provide significant added value.
 - Development Costs: Building and maintaining an integrated streaming tool would require substantial investment in both development and ongoing support.

Discussion: While integrated tools would simplify workflows for less tech-savvy streamers and new users, Twitch must ensure that these tools are optional and compatible with existing third-party systems. Offering these features as value-added options rather than mandatory replacements would mitigate resistance from experienced streamers.

Conclusion: Integrated streaming tools should be developed as optional features to simplify workflows for new and casual users while accommodating advanced users' preferences.

2.2 Real-Time Monitoring

Streamers' Input: Streamers unanimously called for real-time monitoring tools to address technical issues like muted audio or dropped frames. These problems often go unnoticed until viewers report them, disrupting the stream and undermining professionalism.

Feasibility: High

- **Technical Feasibility:** Real-time monitoring tools are standard in many competing platforms and could be implemented using Twitch's existing analytics capabilities.
- **Challenges:**
 - Alert Overload: Overloading streamers with notifications could create additional distractions during live streams.
 - Prioritization: The system must distinguish between critical issues (e.g., audio loss) and minor problems (e.g., slight frame drops).

Discussion: This feature directly addresses streamers' concerns and has high potential to improve stream quality and viewer satisfaction. Allowing streamers to customize alert thresholds ensures that the system is adaptable to individual workflows.

Conclusion: Real-time monitoring tools are highly feasible and should be prioritized for implementation.

3. Enhancing Interface Design

3.1 Customizable Dashboards

Streamers' Input: Streamers expressed frustration with the rigidity of Twitch's dashboard, which limits their ability to streamline workflows. They suggested allowing customization to rearrange and prioritize elements.

Feasibility: Moderate

- **Technical Feasibility:** Implementing modular dashboards is feasible but requires careful UX design to maintain simplicity for less tech-savvy users.
- **Challenges:**
 - Complexity: Over-customization risks creating a confusing interface for casual users.
 - Development Costs: Redesigning the dashboard to accommodate modularity requires significant initial investment and user testing.

Discussion: Customizable dashboards would primarily benefit advanced streamers with complex workflows. Offering standard and advanced modes could cater to different user needs without overwhelming casual streamers.

Conclusion: This recommendation is feasible but should be implemented as an optional feature to balance flexibility and simplicity.

3.2 Accessibility Improvements

Streamers' Input: Accessibility features like real-time captions and multilingual support were consistently identified as inadequate, limiting inclusivity for viewers with disabilities or language barriers.

Feasibility: Moderate

- **Technical Feasibility:** While real-time captioning technology exists, achieving accuracy across languages and dialects is challenging and resource-intensive.
- **Challenges:**

- Accuracy: Captions often struggle with accents, technical terminology, and informal language.
- Maintenance: Multilingual support requires continuous updates to account for language evolution and regional nuances.

Discussion: Accessibility is both a moral and legal imperative for a global platform like Twitch. While challenging, phased implementation—starting with major languages and improving accuracy over time—is the best approach. Partnerships with established providers of captioning and translation services could offset development costs.

Conclusion: Accessibility improvements are critical but require a phased approach to ensure quality and scalability.

4. Strengthening Community Building

4.1 Built-In Community Features

Streamers' Input: Streamers highlighted a gap in tools for engaging with audiences outside of live streams. Many rely on Discord to fill this void, suggesting that Twitch integrate similar features.

Feasibility: High

- **Technical Feasibility:** Twitch can build community-focused features like forums or group chats, leveraging its existing infrastructure.
- **Challenges:**
 - Redundancy: Overlapping with Discord's functionality might fragment communities.
 - Moderation: Maintaining these spaces would require robust moderation tools to prevent misuse.

Discussion: While building in community tools aligns with Twitch's goals, seamless integration with existing platforms like Discord might be a more practical approach. This would enhance community engagement without creating unnecessary duplication.

Conclusion: Community features should be integrated with existing tools to maximize impact and minimize fragmentation.

The recommendations in this study address critical pain points for Twitch streamers and offer practical solutions to improve engagement, workflows, and accessibility. While most proposals are feasible, their implementation should be phased to prioritize high-impact features like discoverability tools, real-time monitoring, and accessibility improvements. Thoughtful design and user testing will ensure these features align with the diverse needs of Twitch's streamer base, fostering a more inclusive and engaging platform.

VII. Conclusion

This study set out to explore the user experience challenges on Twitch, focusing on the gaps in streamer workflows, viewer engagement, and overall interface design. Through interviews with streamers and a detailed thematic analysis, it highlighted key issues and practical recommendations to improve the platform.

Summary of Key Findings

Streamers on Twitch face a number of persistent challenges. Managing workflows is often complicated by the reliance on third-party tools, time-consuming setup processes, and technical glitches. Viewers, on the other hand, struggle with limited ways to interact during streams and the difficulty of discovering smaller channels due to algorithmic biases. The platform's accessibility and customization options also leave much to be desired, particularly for users with diverse needs or limited technical expertise. Finally, Twitch lacks built-in tools for fostering communities outside of live streams, leaving streamers reliant on external platforms like Discord.

Implications

The findings point to several critical areas for improvement:

- **For Twitch:** The platform has a clear opportunity to enhance its usability by focusing on features like better discoverability, real-time analytics, and customizable dashboards. These changes could significantly ease the burden on streamers while improving the viewing experience for audiences.
- **For the Industry:** As live streaming continues to grow, this research serves as a guide for other platforms to create more inclusive and user-friendly environments.
- **For Academic Research:** The study underscores the importance of applying user-centred design principles in highly interactive, digital spaces, contributing valuable insights to the field of Human-Computer Interaction.

Limitations and Future Directions

While this research provides valuable insights, it's important to acknowledge its limitations. The small sample size means the findings may not capture the full diversity of Twitch's user base. Additionally, the focus on Twitch alone limits the generalizability of the recommendations to other platforms. Future research should address these gaps by including more participants from diverse backgrounds and comparing multiple platforms. Testing the recommended changes in real-world settings could also provide further validation.

Final Thoughts

Twitch has grown into a major hub for live streaming, but this growth has brought challenges that can't be ignored. This study highlights the pressing need for Twitch to prioritize user experience by addressing the frustrations of both streamers and viewers. Features like better discoverability for smaller channels, improved chat tools, and enhanced accessibility aren't just improvements—they're essential for creating a more engaging, inclusive, and supportive platform.

Ultimately, the goal of a platform like Twitch should be to empower its community. By implementing the recommendations from this research, Twitch can not only resolve existing pain points but also set a new standard for what live streaming platforms can achieve. It's about more than fixing problems—it's about fostering a space where creators and viewers can thrive together.

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IX. Appendix

1. Participant Information

Research Participant Information			
Name	Followers	Type of Content	Location
Streamer 1	580	Variety	United Kingdom
Streamer 2	1700	Games, Comedy	United Kingdom
Streamer 3	20	Quizzes, games	India
Streamer 4	14900	Gaming	India
Streamer 5	1500	Comedy	United Kingdom
Streamer 6	490	Gaming	India