

Substitute Media Choice of Film and Television Users Under Cloud Storage Controls: Impacts of the Sword Net Campaign

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Abstract

The Sword Net Action has restricted cloud-based film resources, which interrupted user access and pushed many users toward other ways of getting media. This study examines how cloud users substituted media access under policy pressure, focusing on their motives, perceptions, behavioral paths, and satisfaction, while also pointing out weaknesses in the legitimate ecosystem. A mixed-method design (interviews and surveys) was used. The results show that cloud storage attracted users because of its low cost, practical functions, scarce content, and user community. Under these restrictions, users generally followed three paths: turning to new piracy channels, using legal platforms for a limited time, or watching less overall. The data also indicates that none of these alternatives performed better than cloud storage from the users' point of view. This study adds to uses and gratifications theory and media substitution theory by examining substitution behavior in a specific policy context. It also provides a user-centered reference for copyright governance.

Keywords

copyright policy, cloud storage users, alternative media, film and television consumption, uses and gratifications

1. Introduction

Since 2005, the National Copyright Administration, together with multiple agencies, has launched the Sword Net Action, with 21 rounds of campaigns implemented through 2025. Over time, enforcement moved from web pages and forums to cloud storage [1]. In 2025, the campaign focused on audiovisual copyright protection and cracked down on unauthorized redistribution and dissemination [2]. In 2026, it went further by targeting cloud drives, browsers, and search engines that proactively offer pirated content [3]. These policies have led to large-scale invalidation of cloud-based film resources, with links blocked, files deleted, and sharing restricted. The effect is direct. Users who had relied on cloud drives for relatively stable access to film content now face repeated interruptions. Because storage, offline downloading, and link-sharing once made cloud drives a main viewing channel, these restrictions push users to rethink how they access media. What happens next is less clear. Some users may shift to legal platforms, while others may look for less visible alternatives. Yet scholarly attention to this issue remains limited. This study therefore examines cloud users' substitutive media selection behaviors under policy pressure, with attention to their motivations, perceptions, and processes of adaptation. Based on the above background, five core research dimensions are determined for this study to

carry out empirical analysis. This study explores the multiple motives driving audiences to rely on cloud storage for film and television content over the long term, analyzes the subjective perceptions that cloud storage resource control policies generate among ordinary users, summarizes differentiated alternative media paths adopted by audiences after the failure of cloud storage channels, compares differences in user satisfaction across various alternative media in terms of usage experience, and interprets structural shortcomings in the domestic legitimate film and television industry reflected by users' media migration behaviors. Theoretically, uses and gratifications theory has long examined why users choose certain media, but it has rarely been used to study informal content acquisition. Media substitution theory explains how one medium can replace another in function, yet it has paid little attention to policy intervention as a triggering factor. Affordance theory looks at the relationship between technological features and user behavior, but cloud storage as a distinct medium is still underexamined. This study brings these three perspectives together to address those gaps. Practically, this study offers a user-centered reference for improving the user experience on legitimate platforms. It identifies the main reasons users rely on cloud storage and the key problems they encounter with alternative solutions, which helps legitimate platforms understand more clearly why users do not switch to legal channels. Based on this, platforms can make more targeted changes to content supply, pricing strategies, and functional design.

2. Literature Review

2.1 Research on Motivations for Digital Piracy Behavior at Home and Abroad

Why people engage in digital piracy is a central question in information policy and media consumption research. Taylor et al. [4] built a behavioral intention model of piracy that used perceived benefit, moral cognition, and social norms as the main predictors, and these variables provide the starting point for this study. Cox and Collins [5] found a difference by media type: film piracy was driven mainly by cost and availability, whereas music piracy was shaped more by social interaction. Eisend [6] found in a meta-analysis that perceived behavioral control, attitude, and subjective norms consistently predict piracy intention, and that perceived punishment risk reduces the likelihood of piracy. The findings are not fully consistent. Phau et al. [7] confirmed the importance of attitude and perceived behavioral control in predicting film piracy, but they found that subjective norms had only a limited effect. Poort et al. [8] argued that economic motives remain the main driver of piracy, although convenience and content richness are becoming more important. Ye and Qiu [9] suggested that weak legal awareness, together with insufficient platform regulation, creates conditions that make piracy easier. Most of this literature examines piracy in broad internet settings. More focused empirical work on cloud-storage-based film audiences is still limited.

2.2 Application of Uses and Gratifications Theory in Video Consumption

Uses and gratifications theory (UGT) is a useful way to explain why people choose particular ways of watching films. Camilleri and Falzon [10] combined the technology acceptance model with UGT and identified content acquisition, social interaction, information seeking, and entertainment as the main motives for streaming. Among these, content acquisition had the strongest effect on continued use. This gives this study a clear set of motivational categories to work with. Steiner and Xu [11] applied UGT to streaming and argued that binge-watching gives users a sense of control and immersion because the technology allows easy navigation and greater autonomy. That point matters here. Their affordance-based view helps explain how cloud functions can increase user dependence. Henkel et al. [12] examined the motives behind legal and illegal consumption and found that piracy is driven mainly by cost saving, while legal users give more weight to quality and security. Their findings support the inclusion of the cost-saving variable in this study. Hsu et al. [13] brought together media richness and UGT and identified real-time interactivity and presence as central to meeting social needs. This provides a useful reference point for examining cloud communities as invisible collectives. Pan [14], however, took a more critical position. Rather than treating media use as purely instrumental, Pan [14] argued that technology-mediated communication is shaped by the constitutive role of technological environments. This is the main reason UGT is paired here with affordance theory, since user needs do not exist in isolation and may develop through interaction with technological systems. Overall, UGT has been used in a wide range of media studies, but much of this work concentrates on legal platforms or piracy in general terms. Less attention has been given to how user needs shift dynamically under policy shocks.

2.3 Media Substitution Theory and Technological Affordance Theory

Media substitution theory offers a common way to explain media migration. Lee and Lee [15] found clear substitution effects of online video for traditional television and pointed to two main reasons, greater time flexibility and stronger content selectivity. Courtois et al. [16] introduced the idea of a convergent technology repertoire and argued that media use is not just a one-for-one replacement. Users combine several platforms. In this view, substitution is not a zero-sum process. Most of these studies focus on market competition, so they give less attention to how substitution works under policy intervention. Technological affordance theory helps explain media migration at the micro level. Evens et al. [17] compared streaming platforms with traditional television and identified four affordances that shape user preferences: modality, agency, interactivity, and navigability. In their comparison, navigability and agency stood out more clearly than the other two. McMullan [18] argued that affordances are not built into technology in any fixed way. Instead, they develop through the interaction between users and technology. Using Douyin as a case, Liu [19] showed that production, social, and mobile affordances work together to shape participatory experience. Policy variables, however, are rarely included in these affordance-based studies. Media substitution theory explains migration trends at the macro level, whereas affordance theory looks at the micro-level mechanisms that drive activation. The two approaches can be read together. Still, both mainly come from discussions of market competition or technological change, and they pay less attention to how substitution logic and affordance reconstruction operate under policy intervention. That leaves room for this study to bring in policy variables.

2.4 Research Gap: Lack of Empirical Research on Cloud User Behavior

Research on piracy motives, video consumption, and media substitution has produced many useful findings, but several gaps still remain. One issue is the limited distinction between media contexts. Most piracy studies focus on software, music, e-books, or P2P downloading, while cloud storage receives much less attention. Wang [20] pointed out that cloud-based piracy creates new problems for copyright governance, but did not examine in detail how users actually make choices in this setting. Marx [21] showed that cloud storage providers occupy a structural position in the piracy ecosystem, yet his discussion did not include empirical analysis of user behavior. This leaves an important gap. Cloud storage combines storage, sharing, playback, and multi-device synchronization, and these affordances appear to produce a form of dependency that differs from earlier piracy media but has not been examined closely. A second gap concerns change over time under policy intervention. Existing studies mostly take a static view and rarely trace how policy shocks trigger substitution behavior as a process. Aguiar et al. [22] found that copyright enforcement can temporarily reduce access to particular platforms, yet users soon move to other options, so the overall level of piracy does not decline significantly. Danaher et al. [23] identified the availability of legal substitutes as an important factor shaping switching behavior. Even so, these studies are mostly based in Western contexts. They do not systematically examine how users in China move from cloud storage to other channels under continuous copyright policy pressure. The third gap is disciplinary. Domestic research mainly uses legal perspectives. Qin et al. [24] discuss the copyright duty of care of cloud providers, and Wang and Xie [25] examine legal disputes related to infringement identification. Studies from a communication perspective, especially those focused on user behavior, are still largely missing. This study draws together uses and gratifications theory, media substitution theory, and technological affordance theory to examine how cloud users choose substitute media under copyright policy shocks. In this way, it addresses the gaps outlined above. The specific research design is presented in Chapter 3.

3. Research Design

3.1 Research Methods

This study combines in-depth interviews with questionnaire surveys. The interviews are used to examine motivations and the reasoning behind decisions, while the surveys are used to check whether the observed behavioral patterns hold more broadly. One method alone cannot cover both depth and range. Interviews account for 60% (core) and surveys 40% (validation and supplementation), creating a complementary exploration, validation, and explanation process. The interviews are semi-structured, with open-ended questions and follow-up probes where needed. The surveys mainly use closed-ended multiple-choice questions,

with a small number of open-ended items. These cover usage motives, policy perceptions, substitution behaviors, and satisfaction.

3.2 Respondent Recruitment and Sample Characteristics

Participants were recruited through a purposive sampling strategy, together with snowball sampling. The eligibility criteria require participants to have obtained movies or TV shows via online storage services within the past two years and to have perceived that resources have become harder to find or expire faster in the past year. Recruitment took place through Douban, Weibo, WeChat/QQ movie and TV groups, as well as recommendations from social circles. A total of 10-15 participants were interviewed, and the interviews continued until information saturation was reached. During recruitment, attention was paid to variation in age, occupation, usage frequency, duration of use, and membership status. All participants signed informed consent forms.

3.3 Interview Outline Design

The interview guide uses a semi-structured format. It includes open-ended questions that focus on the main research issues, while keeping response directions open and allowing follow-up probes when needed. The design is based on three theoretical pillars: uses and gratifications theory (motives), media substitution theory (substitution behaviors), and technological affordance theory (functional comparisons). The guide includes four core question modules with flexible interview progression. The interview covers four modules with flexible follow-up without rigid sequencing. The first module focuses on usage habits and motives, investigating users' usage frequency, types of accessed content and specific reasons for forming cloud storage dependence through targeted questions about daily usage scenarios and indispensable advantages of cloud storage. The second module focuses on policy perception and attribution, exploring users' perceived changes in cloud resource availability in recent years and their attribution cognition of such changes. The third module centers on substitution behaviors and satisfaction, understanding users' coping strategies when cloud resources are unavailable and their comprehensive experience evaluation of various alternative media compared with cloud storage. The fourth module examines users' attitudes toward the legal ecosystem and future usage prospects, discussing users' willingness to choose legal platforms actively and the optimized improvements of legal platforms that can promote user switching behavior. The four modules progress from objective usage facts to subjective policy perceptions, and then to behavioral evaluations and future attitudes, forming a complete logical interview system, and the interview sequence can be adjusted flexibly according to respondents' actual answers. The core of semi-structured interviews lies in flexible probing based on three standardized principles. Researchers replace abstract why questions with detailed scenario prompts. When participants give generalized and vague answers such as convenient, researchers will further ask about specific convenient functions and corresponding usage examples to guide respondents to put forward concrete and detailed descriptions instead of abstract summaries. Researchers adopt comparative probing methods to clarify users' preference criteria, guiding respondents to compare the advantages and disadvantages of alternative media and cloud storage in multiple dimensions to form a clear behavioral evaluation basis. Researchers also use hypothetical probing questions to explore the boundary of user behavior, setting scenarios of complete unavailability of cloud storage and comprehensive optimization of legal platforms to judge users' potential behavioral changes and choice tendencies.

3.4 Data Analysis and Processing Methods

3.4.1 Thematic Analysis of Qualitative Interviews

The interview data were analyzed using thematic analysis based on a six-step framework: familiarization with the data, initial coding, searching for themes, reviewing themes, defining and naming themes, and writing the report with representative quotes. NVivo was used to organize and manage the coding process. Information saturation was used to decide when to stop recruitment. Recruitment ended when consecutive interviews stopped producing new codes or themes. After the 16th respondent, two consecutive rounds generated no new initial codes, and all four themes were already supported by enough material. Two more interviews were then conducted to check whether this pattern would hold. It did. Data collection therefore stopped at 18. Systematic coding identified four core themes covering user dependency motives, policy perception characteristics, alternative substitution behaviors and channel satisfaction evaluation. Users rely on cloud storage for cost

savings, rare content, technical ease, and community sharing. Tightened copyright reduces resource availability with frequent file deletion and link failure, forming users' habitual cognition of resource invalidation. Faced with policy restrictions, users form three typical substitution behaviors including switching to other piracy channels, temporary compromise on legal platforms and behavioral contraction of viewing reduction. Users recognize the stability advantage of cloud storage but also perceive its partial content limitations, while legal platforms have prominent problems of high cost and content fragmentation. The unresolved gaps in the legal ecosystem make users repeatedly rely on cloud storage, forcing them to balance cost and convenience in media selection. Users use cloud storage because it is cheaper, can provide hard-to-find content, is easy to access, and makes sharing simple. When access becomes more limited, some move to other pirate channels, some briefly pay for legal subscriptions, and others stop altogether. Cloud storage has clear weaknesses, but legal platforms are still expensive and fragmented, so users remain caught between these two options. The thematic structure resulting from the analysis is shown in Figure 1.

3.4.2 Quantitative Statistical Analysis of the Questionnaire

The survey data were analyzed using SPSS. Descriptive statistics, including frequencies, percentages, and means, were used to examine motives, perceptions, behaviors, and satisfaction. Chi-square tests were then applied to identify subgroup differences by age and membership. Open-ended responses were coded through content analysis to supplement the quantitative results. The respondent demographics show that the study included ten interviewees, with an equal gender distribution of five males and five females. Most participants were aged 19–29, accounting for 80% of the sample, while one participant was aged 35. The sample evenly covered student and employed groups, and the working participants were engaged in internet operations, teaching, engineering, media editing and other industries. Participants' cloud storage usage experience averaged 4 years with a range of 2–7 years, and the overall viewing frequency was high, including three daily users, six multiple-weekly users and one monthly user with 2–3 viewing times each time. The membership status of participants was diversified, with four participants holding no legal platform membership, three holding one membership and three holding two memberships. Chapter 5, Discussion, brings together the interview and survey findings. The interviews provide more detail behind the statistical results, while the surveys check whether the patterns identified in the interviews appear more broadly. Taken together, these findings support the main conclusions of the study.

3.5 Research Ethics

This study follows standard research ethics. All respondents are informed about the research purpose, 15–30 minute interview duration, audio recording arrangement, voluntary participation principle and withdrawal right in advance, and all participants sign formal informed consent forms. All identifiable personal information of respondents is stored separately from research data, and all interview content is marked with unified coding such as R01 in citation to effectively protect personal privacy. Questionnaire surveys adopt a completely anonymous design, with no IP address, personal information or other traceable data collected. All interview recordings, transcribed texts and original research data are stored on the researcher's encrypted exclusive device with independent access authority, and all data will be completely deleted after the completion of the follow-up research. All ethical operation procedures are clearly stated in the informed consent form and fully explained to participants during the recruitment stage.

4. Research Findings

4.1 The Core Appeal of Online Storage Services: Dimensions of User Dependency

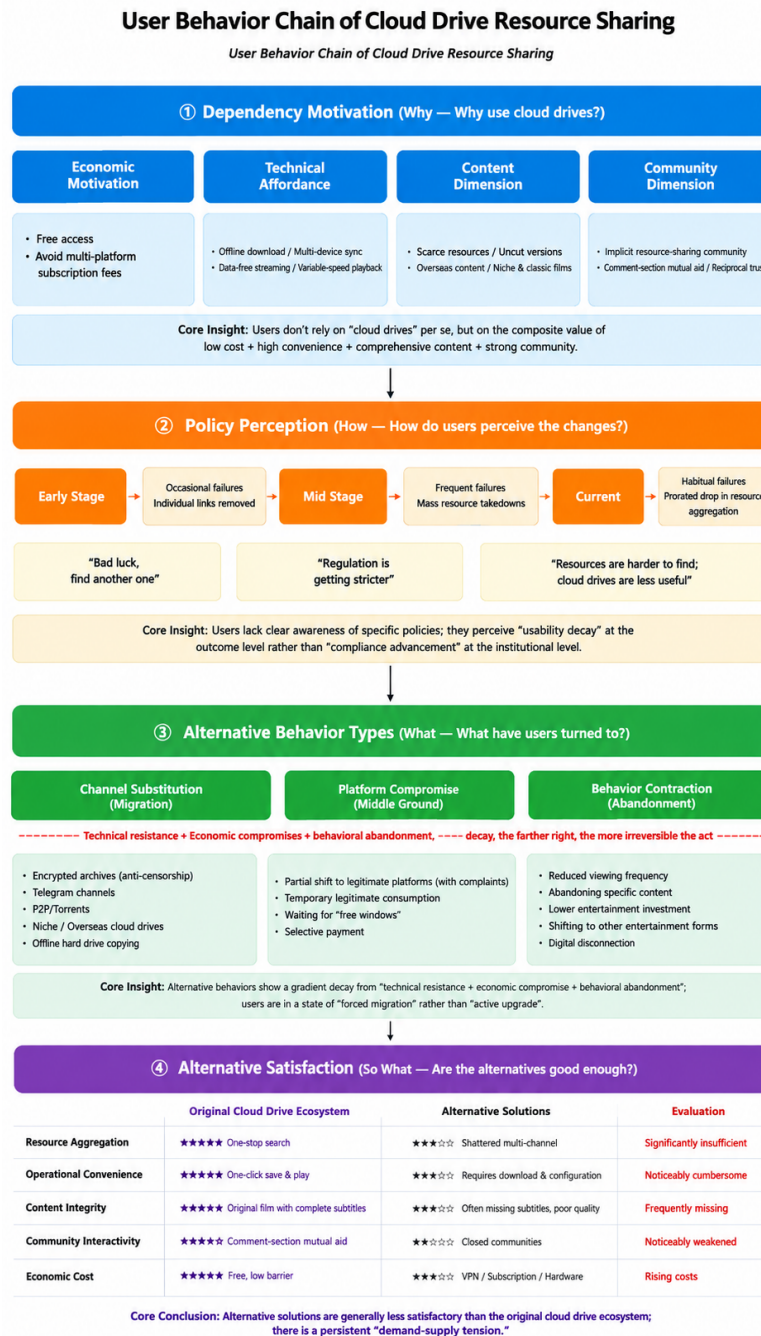
Systematic coding suggests that cloud storage's main appeal rests on four dimensions: economic, technological, content, and community, which together form an integrated appeal bundle that determines user dependency, and the lack of any dimension will weaken users' continuous reliance on cloud storage platforms.

4.1.1 Economic Motivation: Avoiding Membership Fees on Free and Legitimate Platforms

The economic motive appears to be the main driver of user dependency. Most respondents mentioned cost saving or said that one cloud membership costs less than multiple legal platforms. R03 (male, 28, internet ops) put it clearly: Memberships for several platforms cost hundreds a year. Cloud needs only one, save where I

can. R08 (female, 21, undergraduate) said, Students have no money; free is always better. This pattern was strongest among respondents with no legal membership or only one. Even so, the responses do not suggest a simple refusal to pay. What many objected to was multiple platforms, multiple fees. Most said they were willing to pay for content and some had kept cloud memberships for long periods, but they did not want to subscribe to three or four platforms just to access different titles. This point is discussed further in Chapter 5.

Figure 1: User Behavior Chain of Cloud Drive Resource Sharing



4.1.2 Technical Availability: Offline Downloads, Aggregated Resources, Data-Free Viewing

Technological affordances create a kind of operational dependency that users cannot go back from. The features mentioned most often were offline downloading and multi-device sync. As R07 (male, 35, engineer) put it, watch halfway on phone, continue on PC at home, progress syncs automatically. Participants also

referred to ad-free playback and casting. Taken together, these features make the experience feel low-threshold and efficient, so when users move to other channels, the experience gap becomes clear.

4.1.3 Content Dimension: Scarce Resources, Uncut Versions, Overseas Content

Content is the main value users see in cloud storage, and for many of them it can't be replaced. They use it to get material that legal platforms either do not carry at all or provide only in a partial form. R07 said, Old films are only on cloud drives, legal platforms have no rights, so you have to use cloud storage. A similar point appears in R10 (female, 29, media editor): US dramas update several episodes faster than legal platforms; some are never imported, so cloud is the only option. Availability matters here. Users are not choosing cloud storage only because of price or convenience. In some cases, they want older titles that are missing because platforms do not hold the rights. In others, they want faster updates or versions that never enter the local market. Uncut versions are part of this as well. For that reason, even if legal platforms were entirely free, they still would not meet users' demand for specific content.

4.1.4 Community Dimension: Implicit Communities for Resource Sharing

The community dimension concerns the social side of cloud use. Most respondents use cloud drives through WeChat/QQ groups and Douban forums. R05 (male, 19, undergraduate): Joined several groups where people share links, like a small circle. R09 (male, 24, graduate): Douban groups share resources, someone posts, others save. This shared use makes access faster and also gives users a sense of belonging and security. When links fail, they can ask others in the group for help.

4.2 User Perception of Policy Shocks: From Inconvenience to Habitual Failure

Most respondents said cloud resources had changed noticeably over the past one to two years. In particular, link lifespan became much shorter (R08: Used to last six months, now two to three days), stored files were often deleted with violation warnings, and access got harder, with encrypted archives, file renaming, paid groups, and similar barriers becoming more common. Most respondents loosely connected these changes with copyright enforcement, but they could not identify any specific policy. R06 (female, 26, short-video editor) said: I know it's copyright, something like 'Sword Net Action'? Not sure. Anyway, resources are harder to find. Even so, this limited awareness did not seem to change what they did. They still explained their behavior by saying everyone does it or I'm not the one uploading, and they treated failures as the result of platform crackdowns rather than their own responsibility. In other words, they understood policy mainly as added friction in practice, not as something that prompted moral or legal self-examination. Most respondents no longer saw these as occasional failures and had started to treat them as habitual failures. At first, broken links were frustrating. Now, many simply move on and try another one straight away. As R10 put it, I'm used to it, I open three or four links at least, and one working is lucky. This points to a high level of dependency, since users keep accepting extra time and effort instead of stopping use. The policies have made access harder, but for most respondents the inconvenience still has not exceeded what they are willing to tolerate.

4.3 A Typology of Substitute Behaviors

When online storage resources are unavailable, respondents usually respond in three main ways, and these responses can overlap dynamically according to different usage scenarios, with users often switching between different behavioral paths. The first behavioral path is channel substitution, where users shift to other forms of piracy channels including encrypted compressed files, Telegram channels and torrent resources when conventional cloud storage resources fail. The second path is platform compromise, which refers to users' partial and passive shift toward legitimate content platforms accompanied by obvious complaint attitudes. The third path is behavioral contraction, meaning users choose to reduce their overall viewing frequency or directly give up watching specific niche content that cannot be acquired. The core logic of this path is that users stick to free resource access and switch between different piracy channels instead of turning to legal platforms. The alternative piracy channels adopted by users mainly include encrypted archives, Telegram platforms, P2P resource channels, purchased platform accounts and paid resource sharing groups. R09 explained, Search Weibo or buy on Taobao, a few yuan for several groups. R01 made a similar point: If Baidu fails, try Quark, or Telegram, rarely removed. What users stay loyal to is free access, not any single cloud platform. As long as other covert piracy channels remain available, users will actively migrate to these new channels. This behavioral path occurs when users cannot obtain highly desired film and television content through any piracy

channels, forcing them to temporarily subscribe to legitimate platform memberships and cancel the subscription after watching the target content. As R03 put it, I subscribe for a month when I can't find it, then cancel. This choice is a typical passive compromise driven by the temporary unavailability of pirated content rather than active recognition and satisfaction with legal platform services. Once new piracy resources become available again, users will quickly return to informal resource acquisition channels. This behavioral characteristic is closely associated with users' long-term complaints about legal platforms' high charging fees, content censorship and excessive advertisement settings. Different from channel substitution and platform compromise, this behavioral path means users give up both piracy channels and legal platform services and reduce their overall audiovisual consumption. For some niche and non-essential film and television content that cannot be obtained through any channels, users will choose to abandon viewing directly instead of paying for legal resources or searching for new piracy channels. As R08 put it, if niche films are unavailable, I just let it go, not a must-watch. This behavioral response reflects the incomplete guiding effect of copyright policies, proving that policy crackdowns on piracy channels cannot effectively convert users to legal consumption, and will instead cause partial loss of user market demand.

4.4 Satisfaction with Alternative Routes and Gaps in Irreplaceable Functions

All alternative media channels fail to bring users a comprehensive and satisfactory usage experience. Although some alternative channels have partial advantages in viewing quality or platform stability, they have obvious deficiencies in resource aggregation, operation convenience and content completeness compared with cloud storage platforms. The core competitive advantage of cloud storage lies in its integrated service attributes, which integrate free access, aggregated massive resources, offline viewing, stable synchronization and simple operation into one platform. No other alternative media can fully replicate this comprehensive functional combination, which forms the irreplaceable value of cloud storage in users' audiovisual consumption.

5. Discussion

5.1 The Nature of Online Storage User Behavior

Cloud user behavior can be read as a form of functional compensation for gaps in the legal ecosystem. Users often turn to cloud services less because of pro-piracy values than because of a practical calculation about which channel meets their viewing needs at the lowest cost and with the most convenience. When legal platforms do not meet those needs, cloud storage works as a temporary patch. The four main appeals of cloud storage line up with four gaps in the legal media ecosystem. On the economic side, legal services often involve multi-platform fees, while free cloud storage removes that barrier. In terms of content, legal platforms still have an incomplete supply because of censorship, release delays, and missing older titles. Cloud storage makes it possible to access content that would otherwise remain unwatchable. The same pattern appears in platform use. Legal services often limit offline access, have unstable sync, or feel cumbersome to use, whereas cloud storage gives users more control and flexibility. The community dimension also matters. Legal platforms tend to have weak systems for sharing and recommendation, while peer sharing offers a social experience that algorithmic recommendation cannot replace. User dependence is not piracy preference. It points instead to failures across the legal ecosystem. As long as those gaps remain, someone will move in to fill them, whether under the name of cloud storage or something else.

5.2 The Cycle of the Cat-and-Mouse Game

This study's substitution typology suggests that policy enforcement did not eliminate demand for piracy. It changed where that demand goes. After cloud restrictions, piracy moved to Telegram, encrypted archives, paid groups, and P2P, which are harder to monitor and use increasingly covert channels. Rather than shifting to legal platforms in large numbers, users appear to look for other options within the piracy ecosystem. This cat-and-mouse game follows a clear logic. On the supply side, as long as demand remains, providers keep finding new methods and gaps in regulation. On the demand side, dissatisfaction with legal platforms, including high costs, fragmentation, and censorship, still drives users away, even if the channels keep changing. A copyright governance strategy based only on blocking does not make piracy disappear, it tends to push it into different forms. When the legal system still fails to meet basic user needs, the activity continues. For that reason, policy effectiveness should not be judged by how much cloud resources decreased alone, but by whether users have

genuinely shifted to legal consumption. If that shift has not happened, the policy has mostly moved piracy elsewhere rather than reduced it.

5.3 Structural Challenges to the Legitimate Content Ecosystem

Integrating substitution behaviors and satisfaction reveals three structural challenges for the legal ecosystem. The multi-platform copyright barrier creates a multi-payment dilemma for users. Exclusive copyright segmentation divides massive film and television resources into different platforms, forcing users to purchase multiple memberships to watch all desired content. Respondents do not resist paying for high-quality content itself, but reject the platform business model of paying full membership fees for a single program, while cloud storage integrates scattered resources to solve users' multi-payment pain point. Content censorship forms users' psychological resistance to legal consumption. Users generally hold the view that legal platform content has cuts and delays, and the consumption experience of paying for censored content greatly reduces their willingness to choose legal channels. Functional design defects of legal platforms do not match user usage habits. Cloud storage's offline downloading, cross-device synchronous playback and screen-casting functions meet users' flexible viewing needs, while legal platforms set strict restrictions on these core functions, prioritizing copyright control over user experience. Taken together, these problems reflect that the current legal audiovisual ecosystem over-relies on policy protection and copyright barriers, while ignoring the optimization of content supply, pricing mechanism and user service experience. Without systematic improvement of these core deficiencies, it is difficult to realize the lasting conversion of user consumption behavior.

6. Conclusion

Through interviews and surveys, this study examines cloud users' substitution behaviors under copyright policy shocks, with five core conclusions summarized as follows. The core appeal of cloud storage for users is composed of four irreplaceable dimensions including low economic cost, convenient technical functions, scarce exclusive content and intimate community sharing atmosphere. Users form a cognitive tendency of habitual resource failure toward policy restrictions, and they regard policy supervision as usage inconvenience rather than moral and legal restraint. Three typical user substitution behavioral paths are formed after cloud resource restrictions, including channel substitution shifting to new covert piracy channels, passive and temporary platform compromise on legal services, and viewing contraction behavior of abandoning partial content consumption, which proves that simple policy crackdowns cannot promote users' active conversion to legal consumption. All alternative media channels have obvious functional and experiential defects, and cannot replicate cloud storage's integrated advantages of free aggregation, offline stability and simple operation. User migration behavior fully reflects three structural problems of the domestic legitimate audiovisual ecosystem, namely multi-platform repeated payment barriers, incomplete content caused by censorship, and functional design that deviates from user habits. This study makes theoretical contributions by expanding the application scope of uses and gratifications theory in informal media consumption scenarios, taking policy intervention as a new triggering factor of media substitution theory, and verifying the irreplaceable functional bundle of cloud storage based on technological affordance theory. Practically, this study puts forward targeted optimization directions for the legitimate audiovisual ecosystem, including reducing users' multi-platform payment burden, alleviating content censorship experience gaps, and optimizing core functional services such as offline downloading and cross-device synchronization. This study also has certain research limitations. The research sample only covers young and middle-aged online users aged 18–35, lacking data support from elderly and offline user groups, and does not involve regional group difference analysis. In addition, the cross-sectional research design cannot track the dynamic evolution of user substitution behavior in the long term. Future research can expand the sample coverage, adopt longitudinal tracking research methods, and further explore the new piracy ecology formed by emerging technologies such as AI content aggregation and decentralized storage, so as to supplement and improve the research system of copyright policy governance and user media substitution behavior.

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Funding

This research received no external funding.

Conflicts of Interest

The authors declare no conflict of interest.

Acknowledgment

This paper is an output of the science project.

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