

Rethinking the Need for Self-Regulatory Code of OTT Platforms through Analyzing Contemporary Technological Disruptions and Evolving User Behaviours

Deepika Chhangani^{1†} and Avishek Chakraborty²

¹School of Law, Christ University, Bangalore Central Campus, Karnataka – 560 029, India; Visiting Assistant Professor (Law), KPM School of Law, NMIMS, Mumbai – 400 056, India

²School of Law, Christ University, Bangalore Central Campus, Karnataka – 560 029, India

Received: 16th May 2025; revised: 19th September 2025

The self-regulatory code was introduced by IMAI in 2020 which was signed by a lot of OTT platforms but was refuted by Ministry of Information and Broadcasting, India. This paper attempts to revisit the self-regulatory code in line with technological disruptions like geo-filtering which is an improvement over existing technology of geo-blocking. The second part of this study focuses on analyzing 110 respondents from India who are users of OTT platforms in line with content breach through VPN technologies. These responses have been analyzed by using thematic analysis on qualitative coding of the responses. Both the sections have helped the authors of this paper to draw relevant key observations to improve the existing self-regulatory code and suggest notable improvements such as use of Blockchain Technology for copyright immutability and royalty automation, Artificial Intelligence and Predictive Analytics to regulate user behaviour. The study has further strengthened the point that older judicial defenses and intermediary liability cannot provide a holistic framework for these platforms. The authors have also tried to highlight the asset value of copyrights for these platforms and how the self-regulatory code in a revised form can help address legal, ethical and business considerations all at the same time. As a conclusion, while identifying the recognition of copyright as an asset under GAAP (Generally Accepted Accounting Principles), the authors of this paper strongly recommend the revisions to be made to the self-regulatory code to make it more suitable for OTT platforms exclusively dealing in video and audio services.

Keywords: Geo – Filtering, User – Behaviour, Self – Regulatory Code, Copyright Infringement, OTT Platforms

The Covid-19 Pandemic catalyzed the use of online content to contribute majorly in the entertainment sector after 2023. OTT platforms dealing in video and audio services rose as significant players in online entertainment sector or the Digital Single Market, contributing significantly to the overall revenue generated by digital markets. While Copyright hold an indispensable role in this revenue generation, OTT platforms dealing in audio and video services have faced significant challenges around existing technological advancements and changing user behaviour towards use of VPN.

VPN or virtual private network is a cyber-security tool, which helps to disguise the geographical location of a user to avoid unnecessary hacking and tracking of his or her computer systems. The original cyber aim of introducing VPN to disguise geographical location was to safe guard users against cyber threats.¹

However, with the advent of time, technologically advanced users used VPNs to disguise location to eventually access content not given to them as per the subscription plan by OTT platforms. The VPNs allow Indian users to imitate a foreign VPN to breach library and gain access. This accelerated the process of Netflix intensive geo-block crackdown mechanism. One of the biggest justifications, which give rise to user breaching the content libraries of OTT platforms, *has a backdrop of economic and social patterns of change in user attitude and behaviour especially in an online content rich society.*²

The report issued by EY showed 224 Billion INR is lost due to piracy out of which 87 Billion INR is generated from OTT Platforms. This reflects how much piracy economy has drained OTT platforms from their rightful revenue through copyrights, which makes this current research even more significant. The aim of this study is to re-analyze the draft self-regulatory code as proposed for these OTT in the backdrop of much needed improvements over

[†]Corresponding author:
Email: deepika.chhangani@res.christuniversity.in

geo-blocking and evolving user behaviour by use of non-regulated VPN.

It is important to understand that there has been a lot of creativity undertaken by users to circumvent technological solutions deployed by OTT platforms, which was used to safeguard the rights of the content owners, which is punishable under Section 65A of the Copyright Act, 1957. But it is important to understand that this discussion is grounded not only in law, but in technology and business as well. The consistent rise in circumvention of geo-blocks through VPN has consistently let the OTT platforms to evolve technological disruptions like geo-filtering while also using Blockchain Technology and Artificial Intelligence, which are yet to see key reflection in laws of Copyright, notably the Copyright Act, 1957.

The research methodology is doctrinal in nature. To establish the necessity of re-thinking the self-regulatory code, Section 2 of this paper analyzes geo-blocking, its limitations and geo-filtering as a key improvement. While doing so, the authors have identified key legal issues which goes beyond the traditional and conventional constraints of copyright law. Section 3 highlights analyzing evolving user behaviour by closely *studying 110 responses on open ended interviews* undertaken by the authors, where respondents were users of these OTT platforms. Section 3 highlights thematic analysis while doing Qualitative Coding on the open-ended responses to understand evolving user behaviour in line with using VPN technologies. Section 4 highlights key observations from the same while discussing inconsistent applicability of concept of 'intermediary' to OTT platforms, to conclude, that legal framework is unsuitable for them. Section 5 analyses the existing self-regulatory code in line with the identified legal issues and observations from section 2 and section 3. Section 6 provides relevant suggestions and key conclusions.

Analyzing Contemporary Technological Disruptions

The business strategies for OTT platforms dealing in music and video services caters to specific needs of consumers in line with developing a robust intellectual property portfolio. One of the focuses of these portfolios is managing copyright as an important asset. In the recent times, many studies³ have showcased copyright commercialization and its related strategies³ by OTT platforms.

One of the justifications for deploying technological safeguards is to ensure effective

copyright management is through a system where authors and creators of work are not harmed economically, morally and financially.

Phenomenological Analysis of Circumvention on OTT platforms

The act of circumvention of geo-blocking on any OTT platform in general and Netflix in specific has to be understood in close consideration with the understanding of phenomenological analysis⁴. The Phenomenological analysis (as elaborated by in this video, shown by steps) showcases that VPNs like Express VPN circumvents Geo-blocks deployed by Netflix as an OTT platform exponentially well. In a matter of 4 easy steps, any user is allowed to access content which is **not** guaranteed as per the subscribed plan of Netflix, the OTT platform dealing in audio and video services.

Step 1 and 2: Identifying online content not available in the subscribed plan (Fig. 1) (**Movie – Forest Gump**) and confirming the non-availability of the content and locating the country which has access to it. (**Belgium**) (Fig. 2)

Step 3 and 4: Activate the VPN to the desired location and re-search Netflix while refreshing it and locating the desired content (**Movie – Forest Gump**) in the changed library of Netflix. (Figs. 3- 5)

Though ironically, Express VPN rejected few of the countries Government's requirement of storing consumers' data on its server and plugged out its servers. Literature has showcased that user have devised different ways to circumvent geo-blocks to allow illegal downloads and copying of media files which are copyright protected content. Few acts also allow users to convert their files from proprietary streamed formats such as 'Real Media' to open video formats such as MP3, which can allow illegal distribution and circulation of copyrighted content. There are number of technological advancements undertaken by OTT Platforms to tackle circumvention. Geo-blocking does not allow users to cross a territorial block created by an OTT platform to ensure user usage in line with paid subscriptions. Though over time Geo-blocking has created substantial limitations for authors and owners of content on OTT platforms due to use of technologies like VPN.

Limitations of Geo – Blocking

Despite there have been a steep rise into scholarly works around this area, the concept of geo-blocking

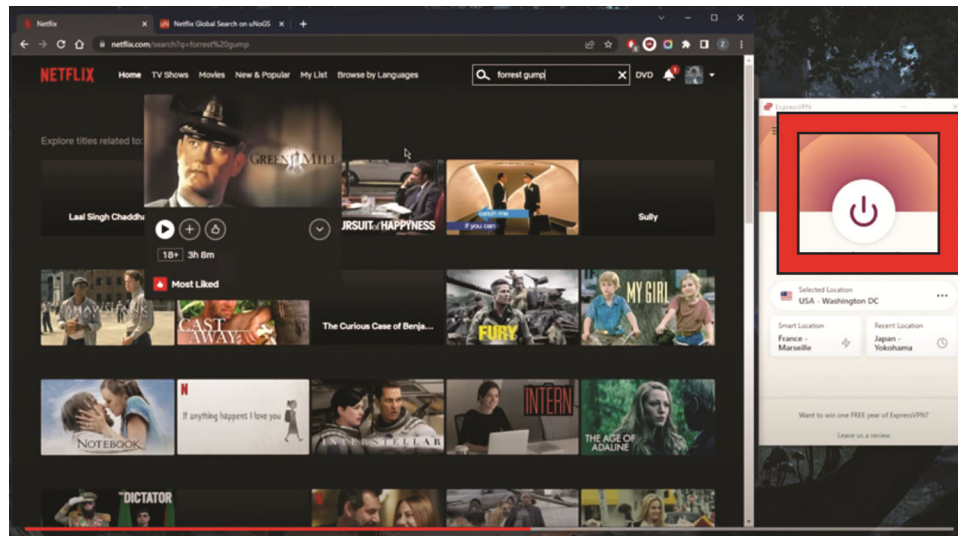


Fig. 1 — Searching Film ‘Forrest Gump’ on Netflix without connecting Express VPN as shown; Film not available in the subscribed plan

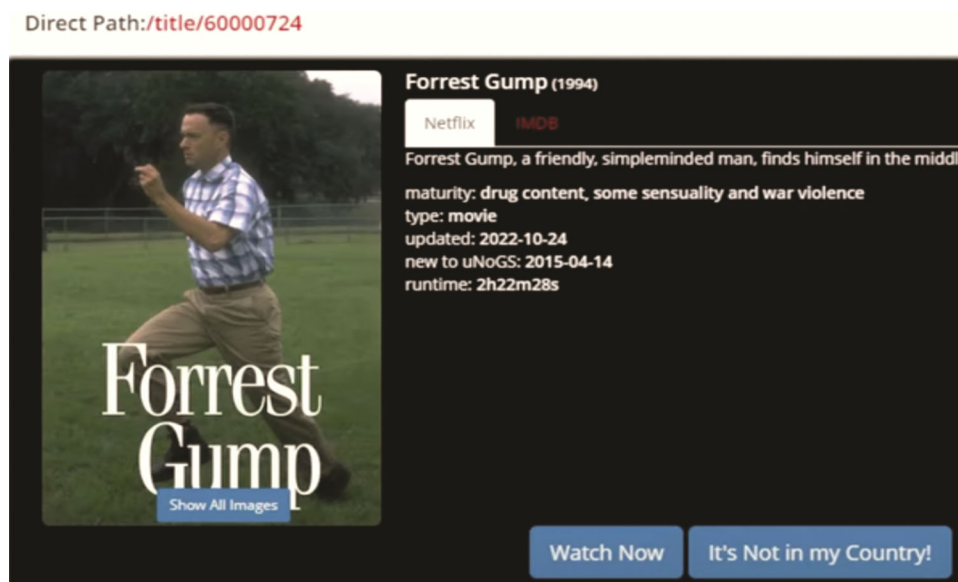


Fig. 2 — Locating_Film ‘Forrest Gump’ on Netflix and its availability in other countries (beyond the geographical territory of the original plan)

initially started for online sale and purchase of goods⁵, which is also subjected to borderless domains giving rise to challenges related to local jurisdiction under various laws. The retailers involved in sale and purchase of goods focused on limited geographical scope⁶ and did not get involved in *cross-border sales* to avoid complexities. Cross-border disputes gave rise to various complexities that generally discourage these retailers involved in cross-border transactions. There have been instances where Netflix as an OTT platform through its deals have showcased the significance of *geo-blocking as an effective measure to protect and safeguard the rights of copyright*

owners and content creators while simultaneously giving access to users on subscribed plans⁷.

The pertinent indicators to deploy geo-blocking has been majorly country of residence, postal address, credit card or debit card details as given by the customers. In certain scenarios, geo-blocking also works as an effective way to control contractual liabilities within a contractual agreement which takes place between an OTT platform and a production house.

The European Parliament committee on the internal market and consumer protection worked tirelessly for years to understand a regulatory measure to ensure effective implementation of rights and liabilities of



Fig. 3 — Locating other countries having Forrest Gump not provided in the subscribed plan

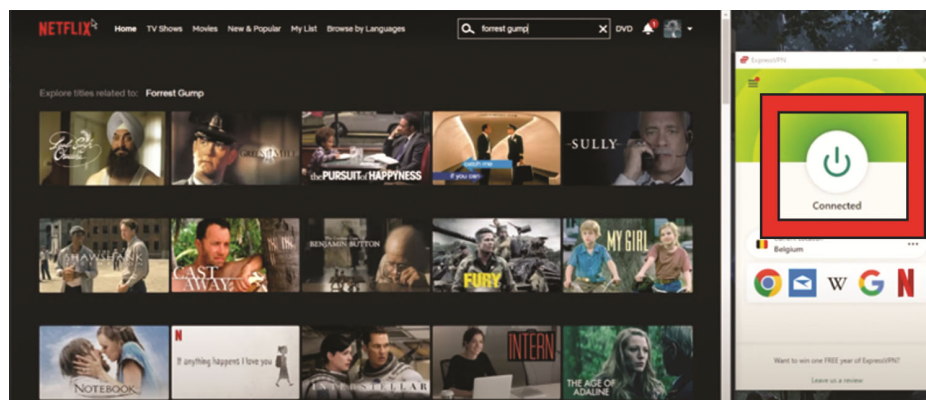


Fig. 4 — Connecting Express VPN to reiterate other country content library accessible or not

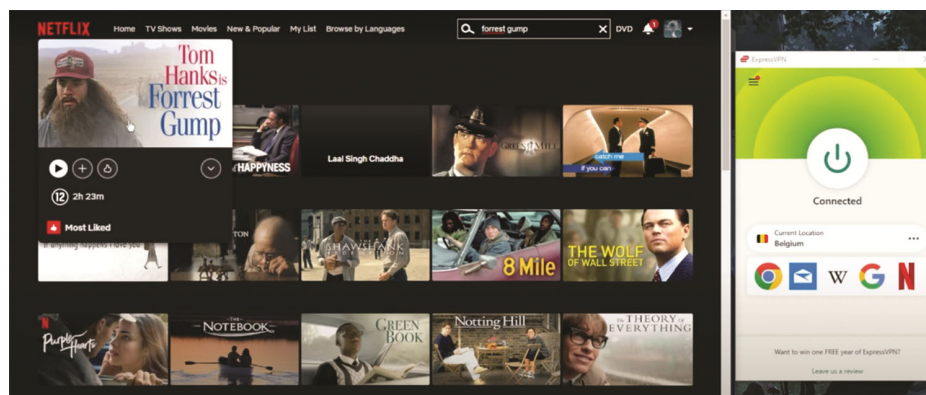


Fig. 5 — Forrest Gump now available in User's subscribed plan content library due to VPN use (originally not given in the subscription plan)

relevant players in the single digital market. It is interesting to note that while geo-blocking regulation focuses on consumers interests, it primarily focuses on transactions related to goods. The regulation clearly excludes audio-visual services from its scope. Hence, the same cannot be used as a legal discourse for OTT platforms in line with Geo-blocks, or geo-filtering later.

The systematic literature review⁸ showcases many recent studies elaborately showcasing how circumvention of geo-blocking challenges the concept of jurisdiction under copyright law. In order to objectively answer this question, it is significant to understand the legality of geo-blocking as a technological measure first. Various EU studies have showcased that through various contractual licenses

service providers such as OTT platforms and production houses undertake geo-blocking into significant ways, as mentioned before.

At this point, it is important to understand that most of the online rights especially video-on-demand (V-O-D) rights are licenses based on national territories. The plan of license as undertaken by service providers and production houses specifically keep in view the *execution and implementation of these rights which are not conventional as the rights guaranteed to physical mediums of copyrighted works*. The accessing of content by users on a certain OTT platform is highly reliant on that OTT platform's cost purchasing ability of content with other production houses and similar entities. Another commercial justification of deploying geo-blocking by digital content providers such as OTT platforms⁹ has a lot to do with *exclusive licensing deals with production houses to gather more user traffic on their platforms*. Various studies have showcased variation of geo-blocking being deployed in different regions of the world. Geo - blocking is majorly used for films and series, hence, becomes significant for OTT platforms dealing in music and video services.

Another form of geo-blocking used by OTT platforms or online entities is restricting *cross-border portability and access*. The concept of cross-border portability states that users of a given OTT service are allowed to access their content with territorial relaxations as if they are viewing this content at home. It is important to note that this concept eventually showcases restrictions to be modulated in form of regulations to allow free flow of content in between physical borders.

The *illegal access of content by users*⁹ have become a significant problem for OTT platforms today, especially the ones dealing in music and video services. Users are able to illegally access content outside of respective physical territory because of VPNs. Many EU studies¹⁰ suggested that this type of geo-blocking was relevantly effective in restricting illegal access by users to a great limit, but could not cater to business and revenue security requirements of OTT Platforms, especially when they are engaged in content deals, as part of online entertainment business. As an extension to this technique various service providers also allow *certain terms and conditions* during the signing of the subscription plan to *download and play the content in territories other than the home territory*.

Geo – Filtering as an Improvement over Geo-Blocking

Most of the contractual negotiations between OTT platforms such as Netflix and other production houses showcases specific emphasis on fulfilling requirements of Geo-filtering processes. These processes, as technological enhancements over Geo-blocks, create filters for geographical locations to avoid copyright infringement of online digital content. As compared to geo-blocking, geo-filtering is a perfect amalgamation of technological management and legal solutions. Geo- filtering was introduced as a much-nuanced approach over geo-blocks which work as complete denial systems. Geo- filtering addresses a lot of key concerns of OTT platforms which are anchored into legal, technological and business considerations. Geo-filtering allows enriched user experience, business flexibility, legal compliance and strategic market entries for such platforms. As a regional filtering system¹¹, geo-filtering allows location specific content access while still experimenting to introduce new content steadily and slowly. While gradually testing such markets geo-filtering allows OTT platforms with a position to monetize their limited libraries. It is important to understand that it does not provide any basis to distribute royalties which are the cornerstone for rights guaranteed under copyright law. Most of the licensing deals undertaken by OTT platforms has *in-depth clauses reflecting on practical working and limitations of these technological disruptions* in order to understand the *access and restriction mechanism for digital content*¹². This *form of regulatory framework* within the licensing deals are currently helping out the OTT platforms to restrict users from illegally accessing the content since national laws fails to address any solution for this problem. Interestingly, in these licensing deals copyright holders or content creators are allowed to audit the technological standards undertaken by OTT platforms. Copyright holders or content creators are sometimes also allowed to seek compensation in case any digital content service provider or OTT platform *fails to meet the standards of a given geo-blocking technology* or if *there is a substantial loss of revenue happening due to the illegal access of content by users*.

Multiplicity of Jurisdictions in wake of Geo-blocking limitations under Copyright and Information Technology Law

In this current paper, a detailed phenomenological analysis has been done on Express VPN to identify the existing limitations in Geo-blocks but it

showcases a critical legal problem under copyright law regime as well. In line with the analysis of Express VPN step guide elaborated before following key legal issues can be identified:

- a) In case of suit of copyright infringement, the copyright holders should file a case in *India as the user is from India*?
- b) In another scenario, the copyright holders should file a case in Belgium *since Netflix Belgium library has been breached*?
- c) *In third scenario, the copyright holders should file a case in US since Forrest Gump is a registered copyright work under US law?*

The phenomenological analysis undertaken in the study showcases that one of the foundational problems which has become consistent over time is copyright infringement cases is surpassing through physical territories. This automatically creates multiplicity of jurisdictions and showcases limitations of existing copyright frameworks around the world to tackle such issues for OTT platforms. While a statutory amendment can address this problem to a limited extent, this will not cater to create a safe ecosystem for copyright and its business value on these platforms as well. Previous studies have showcased how this problem has created major issues for these platforms which needs an immediate solution, which lead to the introduction of the draft self-regulatory code.

Most of the laws around the world relate to copyright, anchor the concept of jurisdiction in line with the concept of territoriality. The legal rationale that any judicial authority within *whose local limits the cause of action has arisen* can take charge of this case. This could not be further from the truth. Netflix as an OTT platform and copyright owners of Forrest Gump¹³ may not subject themselves to the Copyright Law of India as they can simply argue that the cause of action has arisen in Belgium. There is no express understanding of such *complicated copyright infringement* within the national frameworks. The notion of cause of action¹⁴ comprehends disputes to be anchored in physical boundaries only. But, multiplicity of jurisdictional claims has never been a focus of most of the substantive framework of Copyright Law.

The Information Technology Act, 2000 as amended needs to be analysed in this regard. It is important to note that the IT law pertains to a basic legal framework concerning matters related to digital markets and digital platforms. As per Section 75, the

Act is applicable to any offence which is committed outside India, hence, granting the act with an extraterritorial jurisdiction¹⁵. It is important to note that a copyright infringement has both civil and criminal remedies under the Copyright Act, 1957. If a harmonious reading is done between both the laws, it can be concluded that any act of cross-border copyright infringement which has been initiated by a computer or computer network situated in India can bring section 75 into action. However, section 75 legally assumes person based offences, whereas VPN related breaches on OTT Platforms are massive in nature and cannot be reduced to one-person based act. Further, it is important to note that an OTT platform may or may not be interested in going for a criminal remedy every time a cross-border copyright infringement takes place. Hence, it can be concluded that though the Act has extraterritorial jurisdiction through section 75, but the same can be reserved in context of OTT platforms as subscribers are important for business revenue generation, hence filing criminal cases against them seems dubious.

Analyzing Evolving User Behaviour in context of Rights of Content Creators

The creative conditions and social perception of creative content are hugely responsible for evolving user behaviour on OTT platforms through the illegal circulation of files to access these digital works or breach content libraries. It is often raised as an ethical and legal concern that why a certain *user bypasses a geo-block* created by an OTT platform. The justification for the same lies in the fact that if a certain technological advancement becomes more accessible to widespread public in large number, unregulated, it might shift the expectation of customers in terms of availability of creative content at a cost or not.

It is important to understand that the presence of VPNs reinforces certain user behaviour wherein the breach of content library without paying the subscription fee for the same seems to be a perfectly fine act within the user community. On the other hand, a complete ban of VPN could not be a viable solution. The authors of this paper have undertaken a detailed study of 110 respondents who have been an active user of OTT platform, through open ended interviews. Few important questions are reflected in this paper. The data analysis is shown through thematic analysis by doing *qualitative coding* of the

responses. (hence the number of each question is accordingly marked)

Q1 — According to you what is a VPN Technology?

The second question in the study was what is a VPN technology. It is interesting to note that nearly 22 respondents clearly had an idea that VPN technology is used to mask or hide an IP address thereby giving an access to a geographical location which is generally not allowed in a normal set up. While 45 of the respondents forming the majority of the responses had clearly no idea what VPN is so they tagged it as an alternate technology. It is important to note that 12 respondents had a clear idea that VPN technology is used for encryption process, whereas 20 respondents had a clear idea that it is a private network which helps secures a given geographical location.

Q2 — How users are benefitted by VPN technologies on OTT Platforms?

The third question pertaining to how users are benefitted by VPN technologies showed a shocking revelation. Nearly 37 respondents forming the highest majority in the overall respondent counts had a clear idea that a VPN technology is used to access content beyond location that too which is geographical in nature. There was a clear divide between respondents to account of 17 each where one segment stated that VPN allows privacy to users where 17 others had no idea how it benefits the users. 33 believed that VPN provides secured content or it may be fee based. It is interesting to note that these 33 respondents did not have much idea how VPN technologies benefit users on OTT platforms.

In analyzing the first three questions it can be clearly concluded that a good majority of users consuming audio and video services provided by OTT platforms have a clear idea that VPN technology is used to provide access beyond a geographical location and it can help be a private network for such users.

Q3 — What is your understanding on geo-blocks by OTT Platforms such as Netflix?

Nearly 41 respondents out of 110 respondents had a clear idea of geo-blocking by OTT platforms such as Netflix. They clearly stated that any kind of blocking which happens due to geographical boundaries is a geo-block while 17 respondents interestingly talked about how regional licensing arrangements create geo-blocks for OTT platforms.

The vast majority of respondents, precisely 52 in number had not much idea of what a geo-block is. Majority responded by 'no idea' where as few related to the local law or the process of streaming. But if the overall majority count is taken (41+17), 58 respondents has a clear idea that geo-blocking blocks content based on geography notably through regional agreements.

Q4 — What is your understanding on user rights for a creative content?

Nearly 45 respondents either responded with 'no idea' or they believed that they have a right to modify content, which is a surprising revelation. Interestingly 25 of these respondents clearly established that a user right is based on access and permissions given by a copyright holder; whereas the second majority pertaining to 34 respondents had a clear idea that user rights cannot infringe on copyright or intellectual property of the owners. This *helps to eradicate the theoretical assumption that any user who is watching or consuming a creative content be it on OTT platform or otherwise is not really aware about intellectual property or copyright in specific*. It gives a clear indication that there is a sense of awareness that user rights need to run in harmony with the rights of owners under copyright law. But it also showcases a clear challenge where the maximum majority believes that user have a right to modify content.

Q5 — What is your opinion on regulating/not regulating VPN technologies for OTT Platforms?

When being asked whether VPN technologies for OTT platform should be regulated or not nearly 49 respondents out of 110 clearly stated that *these technologies need to be regulated* while 12 interestingly said that they should not be regulated and one respondent clearly wrote '**All Hail VPN**'. It is equally important to note that nearly 21 respondents had no idea whether VPN technologies should be regulated or not whereas 28 respondents believed it is a complex issue and either a moderate measure can be taken or it can be based on a licensing agreement between two parties. It is important to note that while majority focused on regulating these technologies there is a still small cluster of respondents who believe it should not be. It showcases a deep divide among users for accessing content on OTT platforms through VPN technologies while infringing copyright owner rights. **The cases of infringement on cross-border level for OTT platforms can be narrowed**

down to this specific divide between users. It is equally important to understand that a complete ban on VPN technologies cannot be an answer. Technological regulations can draw their theoretical justification from these kinds of responses and can be used to create a techno-legal model.

Inconsistent Applicability of Concept of ‘Intermediary’ to OTT Platforms

During older times¹⁶ the internet intermediaries or ISPs in specific argued that the current technological competence does not allow them to put legal restraint against unauthorized access, download or circulation of pirated versions of creative content. This argument has changed the shift over time as the technological competence of internet intermediaries in general and OTT platforms in specific has increased. Due to technological limitations, YouTube faced a high technological crisis and was unable to segregate infringing and non-infringing acts of users on its platform. It argued that it is incapable to segregate such acts and hence should be given immunity under law. For example, in 2000 in one of the cases¹⁶ Yahoo as an internet service provider clearly argued that it is impossible for Yahoo to restrict all the users or to create a filter mechanism to segregate legal and illegal access to online content on its platform. In today's time, such an argument taken by an internet service provider in specific and an internet intermediary in general will never be taken by courts across the globe or in India.

Another objective standard which came into picture after analyzing the jurisprudential evolution of internet intermediaries and the legal landscape surrounding them was whether an online entity has taken any reasonable steps to prevent the doing of an act which can lead to an act of copyright infringement or infringing the rights of copyright holders under the relevant law. In older times, internet service providers used to argue that they are just facilitators or messengers and are not content holders or creators and hence making them liable under relevant copyright law is not equitable in nature. In today's time, OTT platforms dealing in music and video services not only act as facilitators or communicators of content but are significant players in content creation as well. One of such examples is Netflix Originals¹⁷.

It is significant to understand that the older concept of third-party copyright infringement or liabilities will be only focused on the concept of authorization. The business modelling of OTT platforms takes care of

authorization through subscription plans and licensing models. From this act of authorization there could be *various criminal and common law remedies* which can help create a contemporary legal framework for OTT platforms, but they cannot allow OTT platforms to be purely called as internet intermediaries.¹⁸ It is significant to understand that the Copyright Act, 1957 do not give a very defined scope on what an act of authorization could mean. In UK, the liability of Intermediary is built differently for cases of copyright infringement. The oldest cases dealing with cases of copyright infringement and service providers analyzed the concept of ‘*authorization*’ from a traditional act of expression.

The broader framework of authorization for third-party copyright infringement could include intent such as *inducing, controlling, aiding or even inactivity* or indifference. In various countries, while ascertaining the role of a given website, it was also taken into consideration the specific right in question and less to do with the character of the website. In international conventions like the Lugano Convention, accessibility as a major basis for jurisdiction was disregarded.

Apart from the developments in EU and US law, the Canadian Law also showcased certain developments in relation to determining the liability of intermediaries in relation to copyright infringement. In one of the cases the Copyright Act of 1988 of Canada was taken into consideration to understand *involvement of intermediaries in copyright infringement*. One of the arguments placed in the case was that intermediaries generally communicate work to the public. The case eventually led to the understanding that intermediaries or ISP participates in the entire transmission. An interesting remark taken up by the Copyright Board was that just because intermediary allows *cache memory* it does not amount to *authorizing infringement*.

It is important to understand that most of these laws around the world were not designed for OTT platforms and their complex identity under Copyright law, alongside legal, technological and business considerations. The business modelling of platforms such as YouTube, Netflix, Disney, Hotstar etc. has not been conventional in nature. It started with the concept of technical licenses specially in the realm of platforms working as publishers or distributors both online and off-line. It is an established fact that internet is *structurally transnational* and any efforts to put it in national walls is impossible.

The status of intermediaries has always undergone turbulent interpretations by the courts across the world. In one of the judgements¹⁹ the US Supreme Court clearly stated that there is competing interest between supporting creativity and copyright protection on one hand and promoting technological innovations on the other. In this scenario, it is important to understand that the liability framework for the intermediaries or platforms is not very clear. The aspect of secondary liability can also be constructed on the theoretical framework or enquiries of contributory or vicarious form of copyright infringement. There have been various instances leading to harmonious construction of Copyright and Tort Law, which can be explored to examine the draft Self-Regulatory code further. But, it does not address a clear fit of OTT platforms as intermediaries.

Whether online platforms can be held liable indefinitely or there must be *actual or constructive knowledge of such infringement/ acts of bypassing geo-blocks* in specific reference to OTT platforms. The Digital Millennium Copyright Act, 1998 elaborates on anti-piracy provisions especially focusing on direct or contributory conduct in relation to circumvention of protection walls and systems especially designed to safeguard copyright protected content, in nature of audio-visual works.

Analyzing Draft Self – Regulatory Code in Wake of Enhanced Technological Advancements and User Behaviour

Under this section the authors of this paper will be using the conclusions drawn from the section on technological disruptions and the key observations from the open-ended interviews on 110 respondents as discussed in detail above. It is equally significant to understand that the draft of self-regulatory code can also be examined against the importance of copyright portfolio for OTT platform dealing in audio and video services.²⁰

Many studies have explored the potential of law and technology as behavioral regulators. It is important to understand that *regulation has a significant impact in controlling a certain behaviour of human being in terms of rules or restrictions*.²¹ Jurisprudentially, the same has been elaborated by Koop²², who also discusses the understanding of Regulation as a framework to exercise power but within the realm of social interaction. This automatically justifies the significant importance and place regulation holds in creating an effective legal

framework. Further, the suitability of Safe Harbour Provisions became irrelevant with time, especially for OTT platforms such as YouTube. This irrelevance was aggravated by consistent advancement of technological disruptions and the legal argument in court cases that these platforms are currently facing technological limitations became blurred with time.

In 2020, a lot of OTT platform signed the Self-Regulatory code which was introduced by IMAI (Internet and Mobile Association of India). The same was refused by Ministry of Information and Broadcasting since the legal framework supported by the Ministry was in line with the IT Rules, 2021 to create a Code of Ethics for these platforms. The key features of this self-regulatory code were to create a regulatory environment, work on the age classification and to set up an ecosystem to address consumer complaints. The creation of DCCC shifted the focus of self-regulatory code towards censorship in freedom of speech and expression. This led to a nearly new focus on protecting copyright as a volatile acid for these platforms while using technological disruptions and understanding the evolving user behaviour. Another reason for the same was the commercial considerations for these OTT platforms were far less superior as compared to these inalienable matters.

Blockchain Technology and Royalty Automation

While geo-filtering might look like an enhancement over geo-blocking as a technological disruption, it is important to note that Blockchain technologies have taken a far superior hand for OTT platforms in this regard. A lot of studies have showcased that Blockchain technologies have been used to not only automate royalties but to also automate regional licensing systems into the decentralized ledger system of Blockchain, thereby resolving an important legal issue - multiplicity of jurisdictions during a content breach action by using VPN. It is important to note that functional modules, system architecture have already been explored²³ to understand how Blockchain can be more compliant with copyright and be more efficient for OTT platforms.

It is important to note that the YouTube Content ID system is a globally recognised system and is recognised by India²⁴ as well. The current legal framework in India related to royalty automation on YouTube includes alleged Section 31-D of Copyright Act, 1957, the Broadcasting Bills (introduced and

withdrawn in the Parliament of India) and the IT Rules, 2021. It can be argued that while having a closer look towards the existing systems, the regulations surrounding automated royalties is not fully established in India. Though as part of established industrial practice, YouTube enters into licensing agreements with Copyright Societies²⁵ such as IPRS and PPL. While the Copyright societies have a database of all registered works, the automatic detection through the Content ID system on YouTube²⁶ helps the uploaded video to be connected to the registered works and thereby allows the copyright societies and YouTube to share revenues with each other.

Analyzing user behaviour in line with Access, Rights and Revenue Generation

While analyzing user behaviour through these 110 responses which are elaborated in detail above, it can be clearly concluded that VPNs cannot be completely banned and hence they should be regulated. While taking Question 1,2,3,4 and 5 from the open-ended interviews of 110 respondents, few important observations can be made to further analyze the draft self-regulatory code. Majority of the users have a clear idea that a VPN is used to access content beyond a geographical location. There is a clear awareness among users regarding the use of geo-blocking and its connections with regional licensing agreements. Nearly 59 respondents have an understanding that user rights should run in harmony with the rights of the copyright owners for creative content on OTT platforms. Understanding regarding user rights being based on access and permissions could also be clearly seen. But, the divide on regulating VPNs, since users are quite comfortable in accessing content without paying the relevant cost, shows that a draft self-regulatory code can take an important note of this. It is important to note that a self-regulatory code or a regulation should be given an equal treatment under Article 13 of the Constitution of India in line with any statute or act passed by the Parliament of India. A Regulation has an equal force of democratic legitimacy and accountability like a statute or an act. They have far more practical implications in technology based sectors as compared to Statutes or Acts. The same can be reinforced through important contributions made by Yochai Benkler²⁷ in this regard. Benkler as one of the contemporary thinkers in law and technology has elaborated that law cannot be fixated only in traditional statutes or conventions but needs additional

contemporary sources like regulations – especially marked based rules and codes in technology.

Inapplicability of Older Judicial Defenses

The Frankenstein defense states the intermediaries used to generally argue that they cannot regulate or filter the infringing material and the non-infringing material to assist courts in copyright infringement. Whereas, in the Einstein defense, the service providers used to argue that the *system of technological advancements is so complicated* that even they cannot understand how to regulate copyright infringements in online forms. Specific defense which was called as the 'wink-wink' defense is completely inapplicable in today's scenario of copyright infringement on OTT platforms. This defense specifically talked about hosting services arguing in front of the Courts that they specifically requested the users to not violate copyright even if the service which they are providing is doubtfully illegal in nature.

Conclusion

While analyzing the self-regulatory code as introduced by IAMAI in its current form it can be clearly analyzed that the focus shifted more towards censorship then content and copyright commercialization. The authors of this paper strongly argues that the self-regulatory code can be revisited and can be amended to make it more suitable in with the following suggestions for OTT platforms who are struggling to find a suitable framework under the existing copyright law notably the Copyright Act, 1957. While Blockchain technology can be used to automate royalties, via the concept of copyright immutability as a superior advancement over geo-filtering and geo-blocking, the observations from the open-ended interviews can be clearly taken as a base to test Predictive Analytics under Artificial Intelligence. While substantive framework in copyright can help OTT platforms to a limited extent, improved self-regulatory code can help track and map legal, ethical and business considerations all at the same time. It is equally important to understand that Copyright has been recognized as an asset under Generally Accepted Accounting Principles (GAAP).²⁸ The same analysis can run as a business justification alongside the suggestions on technology and user behaviour. Further, the user divide on regulating VPNs strengthens these recommended revisions.

It is important to note that while exploring and interpreting the relevant players in the single digital market, technological and regulatory frameworks will

be at the forefront. The entire judicial journey of intermediary immunity to intermediary liability is testament to the ever-changing dimensions in digital market and how a pure substantive framework in law is not sufficient to address genuine concerns of OTT platforms. A revised and improved self-regulatory code will not only be effective to regulate these OTT platforms but will also help them to monetize and enhance the asset value of relevant copyrights, thereby increasing revenue generation as well. A regulatory framework is constitutionally justified under Article 13 and should be given an equal treatment in line with the holistic nature of copyright laws around the world.

References

- 1 Zuhe Liu, Application and Security Analysis of Virtual Private Network (VPN) in Network Communication, *Academic Journal of Computing and Information Science*, 6 (2023) 52.
- 2 Sirola, Anu & Markus Kaakinen et. Al, Online Identities and social influence in social media gambling exposure: A four-country study on young people, *Telematics And Informatics*, 60 (2021) 3.
- 3 T S Ramli et.al, Copyrighted Content Commercialization on OTT Media in Indonesia, *Journal of Intellectual Property Rights*, 26 (2021) 353.
- 4 Greening, Neville, Phenomenological Research Methodology, *Scientific Research Journal*, 7 (2019) 90.
- 5 Eldar Haber, Copyrighted Crimes: The Copyrightability of Illegal works, *Yale Law Journal & Technology*, 16 (2014) 454.
- 6 Tolstoy D, et al, The Influence of a Retail Firms's geographic Scope of Operations on its International Online Sales, *International Journal of Electronic Commerce*, 20 (2015) 294.
- 7 Kharab, Deepa et al, Circumvention of Geo – Blocking Measures in Audio – Visual Sector: Related Copyright Issues, *NTUT Journal of Intellectual Property Law & Management*, 12 (2023) 45.
- 8 Stokes, Simon, Digital Copyright: Law and Practice, Hart Publishing, 2009.
- 9 Wilman, Folkert, The Responsibility of Online Intermediaries for Illegal User Content in the EU and the US, Edward Elgar Publishing, 2020.
- 10 Szczepanik, Peter et. Al, Digital Peripheries – The online circulation of audio-visual content from the small market perspective, Springer Series in Media Industries, 2020.
- 11 Mazziotti, Giuseppe & Simonelli, Felice, Another breach in the wall: Copyright territoriality in Europe and its progressive erosion on the grounds of competition law, Emerald Group Publishing Limited, 2016.
- 12 *Ibid*, Other similar videos exist on YouTube at present as well.
- 13 Section 12 & 20 of Civil Procedure Code, 1908 and Section 62 of Copyright Act, 1957 (as amended); *M/s. Virgo Industries (Eng.) Pvt. Ltd. v M/s Venturetech Solutions P. Ltd.*, Civil Appeal No. 6373 of 2012.
- 14 Section 75 (2) of Information Technology Act (No. 21 of 2000) (as amended).
- 15 Ali Almohamad, Jouma, New Approach to Study the Possibilities of VPN Blocking in ISPs, *Journal of Networking and Communication Systems*, 26 (2023) 2.
- 16 Stanislaw T, Internet Service Providers as law enforcers and adjudicators, *Computer Law & Security Review*, 43 (2021) 2.
- 17 Cohen – Almagor, Raphael, Freedom of Expression, internet responsibility and business ethics: The yahoo saga and its implications, *Journal of Business Ethics*, 106 (2012) 353, 354.
- 18 Chenying Y, A case study of Netflix's marketing strategy, *BCP Business & Management*, 42 (2023) 185, 188.
- 19 Strowel A, Peer-to-peer file sharing and secondary liability in copyright law, *Edward Elgar Publications*, 2009.
- 20 Werthner, Hans et al., Introduction to Digital Humanism, Springer Open Access, 2024.
- 21 Reid A, Copyright Policy as catalyst and barrier to Innovation and Free Expression, *Catholic University Law Review*, 68 (2019) 2.
- 22 Christel K & Lodge M, What is Regulation? An interdisciplinary concept analysis, *Regulation & Governance*, 11 (2015) 95.
- 23 Wooyong S and et al., Automated over-the-top service copyright distribution management system using the open rights digital language, *Electronics*, 13 (2024) 336.
- 24 Nandy S, Youtube's Algorithmic Enforcement and Demonetization Policy vis-à-vis Copyright Law: An Edifice of Opacity and Arbitrariness, *Journal of Intellectual Property Studies*, 8 (1) (2024) 103.
- 25 Tagat A, The Indian performing right society pushes for stringent copyright and royalty processes, *The Hindu*, June 25, 2025 (accessed on 15 September 2025) .
- 26 Leron S, Fair Users or Content Abusers? The automatic flagging of non-infringing videos by Content ID on YouTube, *Hofstra Law Review*, 44 (2015) 238.
- 27 Yochai B, Communications infrastructure regulation and the distribution of control over content, 22 *Telecommunications Policy* (1998) 186.
- 28 Wyatt A, Accounting Recognition of intangible assets: Theory and evidence, *The Accounting Review*, 80 (2005) 967.