REMAPPING INDIAN TELEVISION IN THE AGE OF DIGITALIZATION (2001-2020)

Synopsis

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The dissertation tries to locate the shifting contours of television in the digital world by studying a significant transition- the implementation of the Digital Addressable System (DAS) in India- as a case in point. The shift in technology and the introduction of this mode of signal delivery has changed the dynamics among the different stakeholders involved in the process, primarily the broadcasters, the multi-system operators (MSOs), the local cable operators (LCOs) and the consumers and also, the equipment manufacturers and the government. In India, television has been an important medium in the nation-building process used by the government to spread developmental messages. However, after the economic liberalization in 1991, commercial interests seeped in with the coming of private channels, thus, considerably reducing the state's control over the television apparatus. Here, it remains important to point out that the technological shifts led to the growth of cable operators who provided access to private satellite channels along with state-owned terrestrial channels. However, since their growth remained haphazard, the government enacted the Cable Television Networks (Regulation) Act in March 1995 to consolidate the industry. As the industry expanded, the broadcasters started charging the cable operators a fee to show their channels, necessitating them to buy decoders. Huge investments were needed to keep abreast with technological changes and provide viewers access to more channels. This led to the entry of MSOs who were backed mainly by the broadcasters and cable companies and had the money to set up large control rooms called headends. The small cable operators started receiving television signals through the MSOs by paying them a fee per subscriber, while the MSOs paid the broadcasters money to receive the signals. Again, the broadcasters paid the MSOs to carry their channels as the spectrum space during the analogue period was limited. Due to a lack of transparency in terms of agreements between the stakeholders, there were frequent fights, leading to channel blackouts that affected the consumers.[1] The government responded to the issue by bringing addressability to the system by amending the Cable Television Networks (Regulation) Act in 2002. A notification to start the Conditional Access System (CAS) in the four metropolitan cities of India was issued by the Ministry of Information and Broadcasting in 2003. Viewers in the CAS-notified areas required a set-top

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[1] Vanita Kohli-Khandekar, *The Indian Media Business* (New Delhi: SAGE Publications India, 2013): 89-94.

box to watch the pay channels. However, on the directions of the Delhi High Court, the Government of India brought broadcasting and cable services under the ambit of telecommunication services, thereby allowing the Telecom Regulatory Authority of India (TRAI) to make decisions regarding the regulatory structure of cable broadcasting.[2] After a series of meetings and consultations with the stakeholders, TRAI recommended the complete digitalization of cable services in India, making the presence of the Digital Addressable System (DAS) mandatory for consumers to receive television signals. The government felt this way, transparency will be assured in television broadcasting while providing the consumers with more choices.

My objective in this dissertation was not only to trace the history of television broadcasting but to enquire how the mandatory implementation of cable digitalization affected the entire ecosystem. The mammoth task of implementing digitalization in a vast country like India has been challenging and, thus, needs to be evaluated and understood critically. I aimed to highlight the fundamental changes in the Indian television industry in the digital age and the shifting relationship among the stakeholders who are implicated by the digitalization process. By doing so, I sought to question how the developmentalist-democratic rhetoric combines technology, development, governance and markets under neoliberal imperatives.

Digitalization affects the realms of our social life, so our interaction with the digital devices and the role played by the companies controlling the devices becomes a crucial area of inquiry. Since digitalization has socio-economic, political and cultural implications, the policies related to the digitalization process need to be studied critically to make sense of the entire process. At present, television is at a crucial juncture whereby the rapid shifts in technology have led to the emergence of video streaming services which have been quite popular due to the affordances offered by the medium. Though cable broadcasting and video streaming services are quite different from each other in terms of distribution but an enquiry into both has been necessitated due to the emergence of video-on-demand services at a time when cable digitalization was going on in India. The launch of Jio's 4G services in 2016 complemented the rise of video-on-demand services in India, further increasing its popularity. The investment of the broadcasters in creation of their video streaming apps, the

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[2] TRAI, "Interim Recommendation on Conditional Access System," February 23, 2004, 1-49, 1-2, accessed November, 2021,
https://trai.gov.in/sites/default/files/Recommendation_CAS_23022004.pdf.

deployment of android set-top boxes by the MSOs, the offering of broadband services by the LCOs- all point to an amalgamation of both the technologies and thus, needs to be studied.

As shifts in technology lead to changes in existing policy or introduction of a new one, issues of governance and deliberation remain crucial in studying a media policy. For the purpose of this dissertation, I attempted to study the policy documents pertaining to cable digitalization using the critical policy studies approach. My interest in doing so was mainly to understand whether TRAI adopted a consumer-centric approach. By consumer-centric approach, I mean providing subsidies for set-top boxes, and awareness programmes for consumers, tracing their affordability quotient, and offering them more choices. Markets play an important role in neoliberalism, forging collaboration between the state and the industry. The industry benefits from the state in running their business smoothly while the state benefits from the industry in terms of investments for the infrastructure required in bringing a transition. Though this is a well-known conjecture, it requires a deeper analysis, especially in the context of this massive switchover of analogue cable television to digital technology. Thus, I have aimed to study neoliberalism critically with the purpose of pointing out the neoliberal logics that are constantly and dynamically entangled with the other sociopolitical, economic, and cultural logics. The constant changes in policies related to digitalization of cable television, claiming to make it more consumer-friendly, bring to attention the state's unpreparedness in delivering the benefits. This has been a crucial aspect in all the public policies related to the creation of a digital ecosystem. This lack of readiness seems suspicious and can be read in line with Bhabha as an "intentional, political and policy-based feeling of unreadiness, which provides them full freedom to work with whatever they want, to amend whatever rules they want, and to issue executive orders whatever they want."[3] The paucity of set-top boxes, the apprehension of consumers, and the confusion around the date of the transition might have been avoided if the state had not selected what appears to be an unpreparedness strategy of governance. In this dissertation, I have tried to formulate how the claims of 'good governance', 'inclusive technology' and 'participatory development' by the government might fail to take into account the crucial point that technology needs to be at the service of people and not people at the service of the technology.

In the background of these arguments, I have tried to lay out my thesis into five chapters.

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[3]Homi Bhabha,"The state of unpreparedness," *Expeditions*, 2021. www.joinexpeditions.com/exps/113.

The first chapter, *Perspectives on Digitalization and Television Broadcasting: Outlining the Key Debates*, charts the development of television studies by engaging with the work of several Indian and global scholars. Here, I have pointed out that studies in the Western context might be inadequate in understanding the developments taking place in a developing country like India. Thus, I have based my inquiry into understanding how a shift towards digital platforms influences the emerging digital culture. In comparison to traditional practices of watching television, digitalization has shaped a range of practices, including the menu design of the set-top box, distribution of paid media content to public media spaces and watching a programme at one's own time schedule, all of which have changed the televisual experience of the viewers. As Starks points out, while analogue television was mainly national and regional, digital television is more personalized and transnational[4] . Since this is a far-reaching change than just an increase in the number of channels, it has implications for governance, regulation, and economics of broadcast television and associated broadband communications, as well as the democratic processes. Therefore, looking at the available scholarship related to digitalization offered me a roadmap to understand the changing vectors of television studies globally. I have hence, interacted with the work of researchers on digital platforms in order to comprehend the nature of connections between digital platform users and owners. I have also examined the role of technology in transforming the relationship between the state and its citizens in the implementation of practices related to digital governance. The scholarly literature on the worldwide digital transition of television has also been explored critically to understand the concerns of the countries involved in the switchover. Concerns related to the ideal time of deactivating analogue signals, the cost of acquisition of digital equipment and the provision of subsidies for consumers have been the primary concerns discussed by scholars in their work. Since my objective has been to understand the Indian context, which was experiencing the digital switchover at the time, I have discussed the limited available works of scholars on Indian cable broadcasting and digital television. I have then attempted to provide a historical overview of the evolution of television in India, examining the various distribution techniques that have emerged over the years. This way I have sought to locate the complexities of digitalization in general and digital switchover in particular by positioning them within the existing academic framework.

In Chapter 2, *Reading Between the Lines: Tracing the Consumer-centric Approach in Policy Documents*, I have attempted to comprehend the domain of media policy by tracing its

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[4] Michael Starks,*The digital television revolution: Origins to outcomes* (Springer, 2013), x.

evolution through the works of different scholars. I have then attempted to demonstrate how scholars have emphasized the need to critically assess the many facets of media policy formulation through empirical data to interpret the policy environment.[5] In any study of media policy in the digital age, the participation of various advocacy organizations, civil society members, stakeholders, lobbying, and non-formal members, is important as the policy field has become more complex.[6] I have then examined the development of media policies in India, focusing particularly on the evolution of broadcasting policies. In India, since 2004, the Ministry of Information and Broadcasting has tasked the Telecom Regulatory Authority of India (TRAI) with the job of establishing regulations for the broadcasting sector, so TRAI's role in regulating the television broadcasting industry has been discussed while tracing its role in the creation and implementation of policy. In order to make the policy process transparent, open house discussions, consumer outreach programmes and consultation papers seeking the views of the stakeholders were initiated by TRAI along with the creation of a regulatory structure to oversee the agreements and tariffs of the stakeholders. Industry professionals highly debated this aspect. After evaluating TRAI's function as a regulator - examining the technical requirements and economic sustainability of the business while claiming to safeguard consumers' interests - I have then tried to determine the reasons behind the commencement of cable digitalization in India. I have tried to approach this by analyzing the policy documents released by TRAI at various times. I have used a critical policy studies approach to read the policy documents. This way, I have also explored why India's transition to television digitalization occurred through cable television rather than terrestrial broadcast. To make sense of the policy documents, I have attempted to comprehend the elements of public interest, inclusivity, affordability, and changing parameters in the policy. I then draw a conclusion by highlighting the fact that TRAI's focus on digitalization as a growth driver draws attention to TRAI's interest in initiating digitalization to not only solve the constant friction between the stakeholders but also to keep the sector abreast with the changes of a so-called future-proof technology. Since the expense of the switchover was to be shared by broadcasters, MSOs, LCOs, and consumers, while the government gained revenue in the form of taxes from individual subscribers and other stakeholders, TRAI, together with broadcasters and MSOs had a genuine interest in implementing this switchover.

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[5] Hilde Van den Bulck, Manuel Puppis, Karen Donders and Leo Van Audenhove, eds. *The Palgrave Handbook of Methods for Media Policy Research*. London: Palgrave Macmillan, 2019, 13.

[6] Des Freedman, *The contradictions of media power*. Bloomsbury Publishing, 2014,11.

In Chapter 3, *Technology, neoliberal state, and the politics of DAS deadline in West Bengal*, I have attempted to examine the politics of deadline in relation to the implementation of the Digital Addressable System (DAS) in West Bengal. While doing so, I have tried to comprehend how policies connected to the deployment of DAS provide an opportunity to examine the connection between the government, the neoliberal market, and digital technology, highlighting the paradoxes that constitute modernity. I have also attempted to comprehend how DAS fits within the changing political economy of broadcasting in neoliberal India and how it may be positioned within the longstanding trajectory of techno-cultural rhetoric of public policy. In doing so, I have discussed the complexities of the neoliberal framework in which these changes occur. As these changes pertain to the conceptual category of neoliberalism, I have made a conscious attempt to comprehend the theoretical gap between political economy, cultural studies, and studies based on governmentality as they relate to the theoretical understanding of neoliberalism. I have also explored how communication and media studies researchers have contested neoliberalism's legitimacy as both a theoretical framework and a conceptual category. Here, I contend that the idea of neoliberal logics, which is continuously and dynamically connected with other sociopolitical, economic, and cultural logics, maybe a more effective way to comprehend neoliberalism. To understand logic, I have relied on Glynos and Howarth's definition of the term, where they define logic of an activity to be the rules or grammar of the practice, as well as the conditions that make the activity both feasible and unstable.[7] Consequently, I have attempted to perceive neoliberalism as a series of underlying logics discursively interwoven with other logics. In this context, I examined the issue of delay in meeting the deadline for the transition from analogue to digital, taking West Bengal as a case in point. In order to provide context to the discussion related to delay in maintaining deadlines, I have also discussed the problems faced by developed nations like the United Kingdom and the United States and foregrounded the ways in which cooperation between the state and market takes place. After presenting a brief historical background on the issues related to deadlines regarding DAS, I have explored the dispute that took place between the government of West Bengal and the national government over the implementation of DAS. Here I have emphasized the fact that the digital ecosystem is riddled with inherent inconsistencies, which have been evident in various other projects relating to public policy, such as Digital India and the Aadhar project. The flaws in the system prevent the intended recipients of state benefits

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[7] Jason Glynos and David Howarth. *Logics of critical explanation in social and political theory*. Routledge, 2007, 136.

from receiving services meant for them. The major reason for this is that a centralized state's structure has been unable to build appropriate means to regulate or manage this new digital ecosystem as it has not yet been able to comprehend it much. So, the government has viewed technology as the key growth engine in solving the' last mile' challenge. While addressing the issue of 'last mile', scientist Vikram Sarabhai identified linguistic diversity and geographical distance as the primary impediments to last-mile delivery, and consequently, he promoted technology to be the central force in connecting citizens to connectivity and development. Here, I point out that during the 1990s and early 2000s, there was significant interest in the concept of "convergence" in India in order to form new alliances between previously competing goals of identifying the intended and actual beneficiary of development while creating a universal approach to solve a wide range of problems. In this context, entrepreneur Nandan Nilekani's perspective on electronification gained prominence in India. In contrast to Sarabhai's concept of a beneficent state attempting to offer benefits to the people, Nilekani proposed that by establishing the Aadhar ecosystem, the true beneficiary will be registered in the digital arena, leaving the rest of the work to the market. Scholars such as Amartya Sen have cast doubt on the ability of markets to promote the public good. Sen contends that if a market harms the interests of a powerful and politically influential group, then that group will attempt to manipulate the narrative in their favour; therefore, it is necessary to resist and scrutinize them as well as their intellectual arguments.[8] In the context of cable digitization, I believe Sen's explanation for why the market may have traditionally opposed the transmission of public goods is relevant. His rationale applies to why some distribution techniques that may have emerged as public goods had to modify their premise to compete in the market; hence, even if they are doing good, these techniques may not qualify as delivery mechanisms for the public good. So, the question of who actually benefits from cable digitalization is raised. Here, Partha Chatterjee's classification of civil society represented by the 'citizen' and political society represented by the category of 'population' has been used to understand the 'last mile problem'.[9] As the normative citizen provided the Constitutional foundation of the Indian state, all state benefits had to be in the name of the normative citizen. However, since a significant number of the population did not qualify as normative citizens, the state adopted a different structure of distribution. The populace was aware of

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[8] Amartya Sen, *Development as Freedom*, (New York: Anchor Books, 1999), 122.

[9] Partha Chatterjee, *Politics of the Governed*, (New York: Columbia University Press, 2004), 61.

social benefits not just through political procedures, but also through measures like the census, ration card, and bank accounts. Chatterjee emphasized that the objective of the latter activities was to transform individuals who were not yet citizens into genuine members of civil society.[10] It is common knowledge, however, that the two systems were intrinsically incompatible, as civil society viewed the political system with distrust due to its inherent corruption. Therefore, according to the principles of civil society, welfare benefits could never successfully penetrate the barriers erected by political interest groups. The conflict between the state government of West Bengal and the central government's Information and Broadcasting Ministry over the implementation of the deadline for the shutdown of analogue television signal access in the city of Kolkata exemplifies the 'last mile dilemma' in media policy, which persists even in the digital era. This raises the question of whether the difficulties of a market-driven mechanism for regulating entry into the digital ecosystem necessitate a fundamental rethinking of the concept of the 'last mile'?

In Chapter 4, *The Disruptions and Continuities: Ethnographic Reflections*, I have attempted to briefly underline the haphazard development of the cable industry in India, which was later brought under The Cable Television Networks (Regulation) Act, 1995, for consolidation, and how the technological advances led to the entry of a new stakeholder, the multi-system operator (MSO) into the cable ecosystem. During the pre-digitalization era, the ongoing friction between local cable operators, multi-system operators, and broadcasters resulted in numerous channel blackouts owing to nonpayment of rates. The industry criticized the government's inability to formulate a comprehensive policy for the sector as the principal cause of the ongoing conflict between the different parties. However, even after the implementation of digitalization, frictions persisted for a number of reasons, necessitating an assessment into the views of the stakeholders about digitalization. In an effort to explore the sector of cable television in India, I adopted multi-site ethnography as a method to reflect upon the diverse narratives surrounding the digitalization of Indian television.[11] In the chapter, I have also highlighted the difficulties of acquiring access, the reluctance of some of the stakeholders to let an outsider and the contradictions in the narratives of the stakeholders as some of the risks that come with doing ethnography on the Indian cable industry.

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[10] Chatterjee, *Politics of the Governed*, 62.

[11] George E. Marcus, "Ethnography in/of the world system: The emergence of multi-sited ethnography." *Annual review of anthropology* 24, no. 1 (1995): 95-117.

However, the formal and semi-formal interviews did help me to organize my findings around particular themes. The themes like- the inevitability of digital and the unpreparedness of the state, the everyday-ness of television, the changing attributes of the Set-top Box, the conflict between 'choice' and 'affordability', informal benevolence of the local cable operators, the ambiguous objective of digitalization, the conflicting narratives of the MSOs and LCOs, the changing nature of television and the advent of Jio, informality or the absence of organization and creating transparency in business- for whom?- emerged from the ethnographic narratives. I have attempted to elaborate on each of the themes using instances from the narratives of the stakeholders. Thus, in this chapter, I have aimed to deconstruct ethnographic narratives that span several levels of inquiry by delving deeper into meaning-making procedures and addressing the difficulties of connecting with diverse, subjective, and conflicting views. My intention here was to explore the temporal intricacies of the digitalization process, while considering the interruptions and discontinuities in the deployment of the digital addressable system, a dynamic process that is continually evolving in terms of technology, regulation, and distribution. Rather than focusing on a single element, the purpose of this chapter is to present the responses of the participants reflecting the scattered, numerous, and unintelligible characteristics of the implementation of the digital addressable system connecting the shifting industry practices with the broader changes in the political economy of television broadcasting in India.

While the digital addressable system was being implemented, a new mode of delivery named over-the-top video streaming services, started gaining popularity in today's digital environment. As a result, they have come under attention mainly due to the proliferation of consumption methods. So, in Chapter 5, *The Dispersed Terrain of Television: Making Sense of OTT Video-Streaming Service,* I have tried to focus on understanding the importance of television in the digital age, keeping in mind that in developing nations like India, broadcast television networks still remain popular. I suggest that mandatory digitalization of cable television broadcasting is the most direct and explicit attempt towards platform governmentality in the Indian context. During the Covid-19 epidemic, a steady migration of consumers to internet-based platforms became apparent. The broadcasters have developed their own video streaming services and have encouraged conventional consumers to access television programming through digital means. MSOs have also begun offering Android set-top boxes for access to video streaming services, while cable operators have started promoting broadband connections to support their businesses. All of the above changes

occurred while the digitalization of cable television was in progress. Hence, it became essential to monitor the rise and evolution of this new distribution platform, where the stakeholders of the cable television industry are diversifying their businesses. So, in Chapter 5, I have attempted to explore this evolving concept of television by first attempting to define the term Over the top (OTT) and then by tracing the ways in which television is linked to the concept of platform and OTT in terms of the cultural, technological, and policy functions they serve. In order to comprehend the meaning of the word 'OTT,' I have reviewed several governmental texts and relevant research publications. I'm also attempting to comprehend the term 'platform,' which has been used synonymously with the term OTT by industry media and academics. Consequently, I have discovered that both phrases apply to a variety of internet-based services. The word platform has been used to refer to intermediaries promoting exchange and contact between customers and enterprises, while in India, the term OTT has been used mainly to refer to video-streaming services, but it encompasses all services available through the internet from voice calls and text messaging to video and broadcast services.[12] In the context of digitalization, a platform now refers to a place that offers streaming media, user-generated content, and social computing, in addition to the ability to communicate, engage and sell while remaining linked to devices. This has led me to think that over-the-top (OTT) refers to the more technical features of software or hardware, whereas platform refers to a more anthropocentric or abstract category. In the chapter, I have focused my attention on video-streaming services and the scholarly literature around them to comprehend the influence platformization might have on the current conceptions of power and control in the television business. I then analyze the rise and growth of over-the-top (OTT) video-streaming services in India, as well as their growing presence leading to evolving industry and audience habits. I have also examined Indian and international business models of OTT video streaming services in terms of their distribution, technology, and audiences. This way, I have attempted to expand on Amanda Lotz's argument that the behaviours and activities recognized associated with linear television are the product of the broadcast industry's rules designed to increase their advertising and subscription revenue. So, even though the affordances offered by broadcast television and OTT video-streaming services might differ, broadcast industries with a stake in OTT video-streaming services may

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[12] TRAI, "Consultation Paper on Regulatory Framework for Over-The-Top (OTT) communication Services," November 12, 2018, 1-38, pt. 2.1.2- 2.1.3, accessed December 2, 2020. https://www.trai.gov.in/sites/default/files/CPOTT12112018_0.pdf.

impact industrial formations and audience habits. Considering the non-linear nature of video streaming services, some of these industrial practices may resemble those of linear television, while others might differ significantly.[13] This way, the industry will maintain an audience for both linear television and video streaming services which will necessitate a thorough remapping of the contemporary television landscape.

In conclusion, I have emphasized how television's role as a broadcast medium creating national imagery is shifting in the digital era. Due to rapid technological shifts in this era of multiple screens, the viewing habits of the public are being constantly negotiated through disruptive technologies and by the viewers themselves. The expansion of delivery platforms and the consequent spread of television/video displays in stations, shopping malls, automobiles, elevators, and even the exteriors of buildings marked a slow but steady departure from the domestic restrictions of television. In the present era, it is now evidently clear that we can no longer refer to 'TV' as if it were a singular object if we are interested in understanding the present social, cultural, and political roles of television.[14] This argument holds for television distribution as well since the changes have led to a proliferation of fundamental issues related to delivery systems and the ways in which they influence our understanding of television.

The main goal of this dissertation is to describe a moment of transition. The dissertation does not attempt to provide concrete suggestions or resolve these conundrums. The arguments in the dissertation, however, direct our attention to distribution, which is an understudied aspect of the television business. Despite the importance of distribution to the financial and strategic success of television broadcasting, there has not been much written about it in the academic community. This is largely because publicity, promotion, and distribution of television programmes were consistent in the latter decades of the 20th century.[15] Although the arrival of cable television was undoubtedly disruptive in its own way, the present size and scope of change appear to be considerably more significant, which has generated much discussion

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[13] Amanda D. Lotz, "The paradigmatic evolution of US television and the emergence of internet-distributed television," *Revista ICONO14 Revista científica de Comunicación y Tecnologías emergentes* 14, no. 2 (2016): 132-141, https://doi.org/10.7195/ri14.v14i2.993.

[14] Graeme Turner and Jinna Tay, eds. *Television studies after TV: Understanding television in the post-broadcast era*. (Oxon: Routledge, 2009), 3.

[15] Kurt, Sutter, *Distribution revolution: Conversations about the digital future of film and television* (California: Univ of California Press, 2014), 14.

about the momentous changes that are currently occurring. Consequently, this study provides insight into the emergence of new distribution techniques.

While this dissertation covers a broad range of issues regarding the digitalization of the television ecosystem, it ultimately reaches the following conclusion: broadcasters, MSOs, and cable operators must fundamentally reconfigure themselves around new delivery methods or they risk losing viewers to a multitude of potential competitors in the digital environment.

The distribution category is being shaped by debates related to the value of television programming, changes in audience behaviour, and the emergence of simple, intuitive access. Clearly, agency and authority are fundamental to each one of these issues. More critical understanding is needed to understand the infrastructure enabling this transition, notably the role of ISPs and independent distribution platforms that manage the 'pipes' carrying digital television signals.

To address the current instability in the television broadcasting environment, it is necessary to recognize that distribution techniques and technology have sown the seeds of transformation. As a result, media distribution paradigms are evolving from mass to specialized and from synchronous to asynchronous, a movement driven concurrently by competitive pressures, government laws, popular demand, and technological innovation.

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