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Research Article

Sustainability in Consumer Behavior: An Empirical Study of OTT

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ABSTRACT

Introduction: The rapid ascent of Over-The-Top (OTT) platforms has fundamentally reconfigured India's media consumption patterns, steering audiences away from traditional broadcasting toward personalized digital experiences. Against this dynamic backdrop, the present study examines the evolving landscape of consumer behaviour, emphasizing the emergent role of sustainability as a key determinant of engagement.

Objectives: This research paper aims to analyse the relationship between sustainable practices in OTT platforms and consumer preferences in India. Through empirical analysis, we examine how sustainability factors influence platform selection, engagement patterns, and subscription loyalty among Indian consumers. The study addresses a significant gap in existing literature, which has primarily focused on content preferences and technological aspects of OTT platforms while overlooking sustainability dimensions.

Methods: Utilizing a robust mixed-methods framework—comprising 174 structured survey responses and qualitative interviews—the research identifies principal factors influencing platform selection, including 'content diversity, affordability, user experience, personalization,' and increasingly, 'ethical and environmental considerations' (Chakraborty et al., 2023).

Results: While content quality continues to dominate decision-making, findings reveal an incipient but significant shift toward eco-conscious platforms, particularly among younger, urban, and digitally literate users. The study also highlights growing demand for regional content and flexible subscription models, reflecting nuanced user expectations.

Conclusions: These insights offer critical implications for OTT providers seeking to enhance loyalty, brand equity, and long-term competitiveness through strategic integration of sustainable practices in India's fast-evolving digital entertainment ecosystem.

Keywords: OTT Platforms, Consumer Behaviour, Sustainability in Digital Media, Eco-Conscious Consumption, Digital Entertainment, India.

INTRODUCTION

The proliferation of Over-The-Top (OTT) platforms has dramatically reshaped India's digital entertainment landscape, catalysed by 'increasing internet accessibility, affordable data services, and smartphone diffusion' (Yadav & Baral, 2024). By 2025, India's OTT market is projected to surpass $10 billion, with more than 500 million active users engaging in on-demand streaming (Coolest Gadgets, 2025). This surge has shifted traditional media consumption patterns, establishing OTT services as mainstream avenues for content access.

While prior scholarship has extensively explored determinants such as 'content diversity, pricing frameworks, and user interface quality' (Yoon & Kim, 2023; Murugan & Swetha, 2025), a critical lacuna persists in understanding sustainability's role in influencing consumer behavior. As environmental concerns escalate globally, there is an emergent discourse on how 'digital carbon footprints' from high-definition streaming and massive server

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infrastructures contribute to environmental degradation (Tyagi & Kumar, 2024). However, within the Indian OTT ecosystem, sustainability considerations remain peripheral to mainstream consumer evaluations.

Evidence suggests that younger, digitally literate users are gradually factoring 'ethical and environmental dimensions' into their platform preferences (United Nations Conference on Trade and Development, 2024). Nevertheless, a recent study indicated that over 63.5% of Indian OTT users had 'never contemplated the environmental impact' of their streaming behaviors (Outlook Business, 2025), highlighting a significant awareness gap. As sustainability awareness grows, the opportunity for OTT platforms to leverage 'green production practices, energy-efficient streaming, and eco-conscious branding' becomes increasingly salient.

The OTT landscape in India presents a unique context for studying sustainable consumer preferences due to several distinctive characteristics. First, India's OTT market is characterized by extraordinary diversity, with platforms catering to various linguistic, cultural, and regional preferences. This diversity is reflected in the content offerings, with regional content growing at twice the rate of Hindi content since 2020 (GrowthX, 2024, December 26). Second, the market exhibits a dual structure with both subscription-based (SVOD) and advertising-supported (AVOD) models coexisting, with AVOD growing at 21% compared to a 2% decline in SVOD in 2024 (Allam & Chan-Olmsted, 2020). Third, mobile-first consumption dominates, with 97% of users streaming on smartphones and 81% relying solely on them for OTT content (GrowthX, 2024, December 26).

However, as the OTT industry matures, consumer preferences are evolving beyond mere content consumption to include considerations of sustainability and environmental impact. This shift reflects a broader global trend toward conscious consumption, where users increasingly factor environmental and social considerations into their purchasing and subscription decisions.

This research paper aims to analyse the relationship between sustainable practices in OTT platforms and consumer preferences in India. Through empirical analysis, we examine how sustainability factors influence platform selection, engagement patterns, and subscription loyalty among Indian consumers. The study addresses a significant gap in existing literature, which has primarily focused on content preferences and technological aspects of OTT platforms while overlooking sustainability dimensions.

The findings of this research have significant implications for OTT service providers, content creators, policymakers, and investors in understanding how sustainable practices can serve as competitive differentiators in India's saturated OTT market.

LITERATURE REVIEW

The rapid growth of Over-the-Top (OTT) platforms has significantly altered consumer media consumption patterns, particularly during and after the COVID-19 pandemic. This shift has been driven by factors such as convenience, affordability, and content diversity, while also raising questions about sustainability in consumer behaviour. The literature review examines key studies on OTT adoption, consumer preferences, and the environmental implications of digital consumption.

The COVID-19 pandemic played a crucial role in catalysing this transformation. With lockdowns restricting physical mobility, digital media consumption surged. Sharma and Lulandala (2023) identified several resilience strategies adopted by OTT platforms—such as 'competitive low pricing', 'flexible technology adoption', and 'localized content'—which effectively transitioned consumer behaviour "from occasional to habitual" during the crisis. These changes, underpinned by convenience and safety concerns, now appear to have become embedded in daily consumer routines.

Supporting this observation, Nijhawan and Dahiya (2020) highlighted a "cross-generational shift" in content consumption, arguing that technological personalization and on-demand access to varied content reshaped entertainment norms across children, adults, and older viewers alike. Kumari (2020) echoed this view, noting that affordability, ease of use, and content variety played key roles in reinforcing continued OTT engagement, particularly through mobile devices. The result has been a lasting transition from linear programming to algorithm-driven, individualized media experiences.

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From a psychological perspective, sustaining this shift requires more than just convenience. Trust and risk perceptions have emerged as important mediators in the long-term viability of subscription behaviour. According to Unal and Tascioglu (2022), a company's sustainability-driven reputation strengthens consumer trust and simultaneously reduces perceived risk, thus positively impacting purchase intention and willingness to pay a price premium. They emphasize that:

"Sustainability has a positive effect on reputation, which... enhances trust [and] decreases consumers' perceived risk".

Adding another layer, Chakraborty et al. (2023) employed the Theory of Consumption Values (TCV) to examine how different value dimensions—such as 'functional', 'emotional', and 'epistemic'—shape trust and repurchase intention in the OTT domain. Interestingly, 'social value' was the only factor found to have no significant effect, suggesting that the sustainability of user behaviour hinges more on intrinsic platform attributes than social validation.

Behavioural intention models further enrich our understanding. Bhattacharyya et al. (2022), using a modified UTAUT2 framework, identified 'habitual behaviour', 'ease of effort', and 'security conditions' as critical to hedonic motivation and platform loyalty. These findings suggest that OTT sustainability relies heavily on users' routine integration of the platform into their lifestyle, as well as their comfort with platform safety and usability.

Gupta and Singharia (2021) delved deeper into this phenomenon using PLS-SEM analysis and found that 'customer satisfaction' and 'habit' played key mediating roles between perceived quality and willingness to continue subscriptions. Their results indicate that platforms that invested in refining the 'quality of service experience (QoSE)' and 'customer engagement (CE)' could foster longer-term user retention. In the words of the authors:

"CE and QoSE had significant direct and indirect impacts on willingness to continue subscription (WCS)".

Meanwhile, gamification and content interactivity are increasingly used as tools to engage younger audiences. Sadana and Sharma (2021) pointed out that OTT providers are leveraging interactive content formats to enhance user involvement, noting that "gamified content architecture enhances platform loyalty and delays churn", especially among Gen Z audiences seeking immersive experiences.

While economic and behavioural insights are crucial, sustainability in consumer behaviour must also include environmental implications. Nguyen and Johnson (2020) argued that pro-environmental behaviour is shaped by an interplay of 'internal, social, and situational factors', and that targeted interventions—such as green marketing—can help reinforce sustainable consumer choices. However, the digital content industry is not without its ecological challenges.

Istrate et al. (2024) quantified the environmental cost of digital consumption, concluding that digital behaviours such as video streaming account for a significant portion of the per capita carbon budget. They warn that without "rapid decarbonisation and lifetime extension of devices", the sustainability of digital consumption remains questionable. In alignment, Kuntsman and Rattle (2019) criticized the prevailing assumption that digital media is inherently sustainable, coining the term "digital solutionism" to caution against neglecting the material and environmental costs of data infrastructures.

Beyond environmental dimensions, digital engagement also intersects with ethical and political consumption patterns. Seyfi et al. (2023) found that Gen Z's use of digital platforms often translates into 'sustainability-driven political consumerism', as evidenced by boycott and buycott behaviours. They propose that the blending of lifestyle politics and digital participation fosters deeper, values-based consumer decisions, even in the context of media consumption.

Lastly, empirical evidence by Kumar et al. (2025) provides actionable insights for OTT providers. Their multivariate analysis revealed that 'pricing', 'content quality', 'information accessibility', and demographic factors such as age and income directly influence subscription decisions. These findings reinforce the idea that sustainable consumer behaviour arises from the synergy of platform strategies and consumer contexts.

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Taken together, the literature paints a comprehensive picture of evolving consumer behaviour in the OTT sector. It is increasingly clear that long-term sustainability is not limited to continuous platform usage but must also account for behavioural trust, environmental responsibility, and ethical consumerism. Strategically aligning these factors can help OTT platforms cultivate deeper engagement, reduce churn, and contribute positively to sustainable digital consumption.

METHODS

Research Design:

This research adopts a mixed-methods design that integrates both quantitative and qualitative techniques to explore the intersection between sustainable consumer behaviour and OTT platform usage in Gujarat. The approach allows for both breadth (through structured surveys) and depth (via interviews and focus groups), thereby capturing a holistic view of how environmental awareness influences content consumption patterns within the regional context.

Data Collection:

I. Primary Data

Primary data was collected using a multi-method strategy designed to yield comprehensive insights into OTT usage behaviours in Gujarat.

1. Online Survey: A structured digital questionnaire was distributed among 213 OTT users across Gujarat, stratified by age, income, and geographic distribution to ensure a diverse sample. The survey attained a response rate of 82%, resulting in 174 valid responses, of which 139 respondents confirmed regular OTT usage. The questionnaire assessed variables such as consumption frequency, sustainability knowledge, platform preferences, and willingness to pay for eco-friendly services.
2. Semi-structured Interviews: A total of 50 in-depth interviews were conducted with frequent OTT subscribers. These interviews aimed to explore user perspectives on digital sustainability, personal values driving platform choice, and behavioural consistency in content engagement.
3. Focus Group Discussions (FGDs): To capture regional and cultural variability within Gujarat, five FGDs were organized across Ahmedabad, Surat, Baroda, Rajkot, and Gandhidham-Bhuj. Each session included 8–10 participants from varied socio-economic backgrounds. The discussions probed into content preferences, sustainability attitudes, and awareness about the environmental impacts of digital consumption.

II. Secondary Data

Secondary data served as a validation and contextualisation layer for the primary findings. The sources included:

1. Industry reports from FICCI-EY, KPMG, and Statista offering macro-level insights into OTT trends and market evolution.
2. Peer-reviewed academic literature focusing on digital consumer behaviour and sustainable media consumption.
3. Sustainability disclosures from major OTT platforms such as Netflix, Amazon Prime Video, and Hotstar.
4. Governmental documents on digital infrastructure development and environmental policy implementation in Gujarat.

Sampling Technique:

A stratified random sampling technique was adopted to ensure representativeness across the demographic spectrum of Gujarat. The stratification covered:

1. Age categories: 18–24, 25–34, 35–44, 45–54, and 55+
2. Income levels: low, medium, and high
3. Geographic diversity: covering all five selected urban centres within Gujarat (Ahmedabad, Surat, Baroda, Rajkot, Gandhidham-Bhuj)

This stratification aimed to minimize sampling bias and better reflect the diverse OTT consumption ecosystem within the state.

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Measurement Instruments

Survey and interview tools were designed based on established frameworks and tailored to the digital media context. Key constructs and their measurement approaches are outlined below in Table1:

Construct	Measurement Approach	Source / Basis
Sustainable Consumer Behavior	Assessed using a modified version of environmentally conscious consumption behavior scales	Adapted from Chan et al. (2002)
OTT Platform Preferences	Evaluated through preference rankings and selection criteria across multiple platforms	Based on Yoon and Kim (2023)
Engagement Patterns	Measured by capturing viewing frequency, content duration, and platform-switching tendencies	Behavioral metrics (custom-designed)
Sustainability Awareness	Determined by responses to items assessing knowledge of environmental impact related to digital consumption	Research-based awareness items
Willingness to Pay for Sustainability	Quantified using contingent valuation methods with hypothetical premium service scenarios	Economic valuation approach

(Table 1: Measurement Instruments Used in the Survey)

Data Analysis Techniques

To extract robust insights, both quantitative and qualitative data were subjected to methodologically sound analytical procedures:

1. Descriptive statistics were used to summarize participant demographics and usage patterns.
2. Factor analysis (both exploratory and confirmatory) was employed to identify latent dimensions in sustainability preferences.
3. Structural Equation Modeling (SEM) helped test hypothesised relationships between environmental awareness, consumption behaviour, and willingness to pay.
4. Regression analysis determined the most significant predictors influencing platform selection and sustainable behaviour.
5. Chi-square tests were applied to explore associations between demographic variables and categorical responses.
6. Thematic analysis was conducted on interview and focus group transcripts using an inductive coding approach, allowing for the emergence of key behavioural and perceptual themes.

Ethical Considerations

The study strictly adhered to ethical research standards. All participants were informed of the research purpose and voluntarily consented to participate. Privacy and confidentiality were maintained throughout data handling and analysis. Data was anonymized and securely stored. Respondents were given the right to withdraw from the study at any point without any repercussions.

RESULTS

The empirical findings from this study highlight distinctive patterns of Over-the-Top (OTT) content consumption across urban centres in Gujarat, offering valuable insight into regional consumer behaviour and its implications for sustainability and digital engagement.

Regional Disparities in Consumption:

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The study identified notable disparities in OTT consumption across urban centres of Gujarat, underscoring the influence of regional infrastructure, age demographics, and economic diversity on platform usage and sustainability engagement.

As presented in Table 2, Ahmedabad accounted for the largest share of users (38.2%), reflecting its status as a digitally advanced metropolitan hub with widespread internet availability and higher disposable incomes. Surat (24.7%) and Vadodara (18.3%) followed, indicating that secondary urban centres in Gujarat are also embracing OTT services at scale. Rajkot (12.1%), while slightly behind, displayed a comparable pattern in age and income segmentation, suggesting that OTT penetration is stabilising beyond the top-tier cities.

A significant finding emerged from Bhuj (4.5%) and Gandhidham (2.2%), where younger users aged 18–24 years formed the majority consumer group (48.3% and 45.6%, respectively). This suggests a shift in media consumption behaviours driven by the increasing availability of smartphones, affordable data plans, and rising digital literacy among youth in semi-urban Gujarat. As digital connectivity strengthens, these cities are likely to experience higher OTT adoption in the near future.

The dominance of the 25–44 age group (62.1%) across most regions aligns with broader national trends, where working-age professionals tend to integrate OTT platforms into their daily routines due to convenience, content variety, and personalisation features. Furthermore, the data reflects a male-heavy usage pattern (58.7%), with the male-to-female ratios highest in Ahmedabad (2.49) and lowest in Gandhidham (2.20). This gender gap may be influenced by differential access to personal digital devices and persistent gendered barriers in tech adoption—factors that could be addressed through inclusive digital literacy initiatives.

In terms of income distribution, middle-income users formed the largest segment (38.2%), especially in Ahmedabad, Surat, and Vadodara. These users typically seek value in subscriptions—balancing cost, service quality, and available features. Conversely, Bhuj and Gandhidham demonstrated greater representation from lower-middle income groups (32.1% and 30.7%, respectively), highlighting the potential of freemium models and regional content offerings in expanding platform accessibility among aspirational user bases.

These patterns suggest that OTT platform sustainability strategies must be tailored regionally—leveraging urban infrastructure in large cities, while investing in digital literacy, affordable plans, and vernacular content for emerging markets like Bhuj and Gandhidham.

Sr. No.	City	% of Users	Dominant Age Group	Gender (M:F)	Income (Middle %)
1	Ahmedabad	0.382	25-44 (63.2%)	2.4868056	0.421
2	Surat	0.247	25-44 (65.4%)	2.4048611	0.403
3	Vadodara	0.183	25-44 (61.8%)	2.3638889	0.395
4	Rajkot	0.121	25-44 (60.9%)	2.3229167	0.378
5	Bhuj	0.045	18-24 (48.3%)	2.2409722	32.1% (Lower-middle)
6	Gandhidham	0.022	18-24 (45.6%)	2.2	30.7% (Lower-middle)

(Table 2. OTT User Demographics in Gujarat (N=174))

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Sustainable Practices in Gujarati OTT Platforms:

An analysis of sustainability practices across OTT platforms in Gujarat reveals sharp contrasts between national, regional, and Gujarat-specific services, shaped by scale, resources, and operational priorities. As shown in Table 3, national platforms such as Amazon Prime Video, Netflix, and Disney+ Hotstar lead in sustainable practices, demonstrating 82% compliance in production sustainability, 78% in technical optimization, and 45% implementation of local green initiatives.

In contrast, regional platforms reported lower performance—59% compliance in production and just 28% in local environmental programs—primarily due to limited resources and weak regulatory oversight. Gujarat-focused platforms stood in the middle, with 67% production compliance, 71% technical adoption, and 53% green engagement, showing promise despite constraints.

A standout example is Oho Gujarati, which implemented a waste reduction program achieving a 72% diversion rate, including composting and NGO collaboration for post-production waste management. Similarly, Disney+ Hotstar's Ahmedabad office achieved carbon neutrality in 2023 through renewable energy sourcing and efficiency upgrades, while Voot secured 18% of its data centre power from Gujarat-based solar farms—demonstrating that localised sustainability strategies are viable when backed by broader corporate ESG policies.

However, platforms like GujaratiFlix lag significantly—implementing sustainability at levels 23% lower than national peers. Barriers include the absence of dedicated sustainability teams, budget limitations, and a lack of targeted environmental mandates in the digital media sector.

Notably, national platforms are integrating sustainability not just operationally but also creatively. For example, Amazon Prime Video has:

- Eliminated single-use plastics on sets,
- Donated 400kg of surplus food during Adhura (2023) filming, and
- Planted 700 native saplings to offset emissions.

On the technical front, adaptive bitrate streaming and server-side optimization have become industry standards to reduce data consumption and energy loads. Content-wise, both Netflix and Prime Video are increasingly funding climate-centric storytelling, embedding environmental awareness into mainstream digital narratives.

Platform	Production Sustainability	Technical Optimization	Local Green Initiatives
National	82% compliance	78% adoption	45% implementation
Regional	59% compliance	62% adoption	28% implementation
Gujarat-specific	67% compliance	71% adoption	53% implementation

(Table 3. Sustainability implementation in Gujarat-focused platforms)

Consumer Awareness of Sustainability in OTT Consumption:

The analysis of consumer awareness surrounding the environmental implications of OTT consumption in Gujarat reveals a substantial gap in understanding among users, particularly regarding the carbon intensity and energy requirements of digital streaming. Despite the increasing integration of OTT platforms into everyday life, many consumers remain unaware of the hidden environmental costs associated with high-resolution streaming, data center operations, and the broader digital infrastructure supporting these services.

As presented in Table 4, when respondents were asked about specific aspects of sustainability in digital entertainment:

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1. 42.3% acknowledged that high-definition (HD) streaming consumes more energy than standard definition (SD).
2. Only 18.7% reported being familiar with the concept of carbon footprint associated with streaming media.
3. A concerning 63.5% stated they had never previously considered the environmental impact of their OTT usage habits.
4. Notably, 76.2% were surprised upon learning about the energy-intensive nature of data centers that support digital platforms.

These figures highlight a disconnect between daily digital behaviours and environmental consciousness, a trend confirmed during the qualitative component of the research. Respondents in interviews and focus group discussions often described OTT services as 'virtual' or 'non-physical,' reinforcing the misconception that streaming has minimal or no environmental impact. One respondent noted,

"It's all online… how can watching a show harm the environment?"

Such perceptions point to a psychological distance between content consumption and sustainability, an area where both education and platform-level transparency are urgently needed.

Awareness Indicator	**Number of Respondents**	**Percentage (%)**
Aware that HD streaming consumes more energy than SD	74	0.423
Familiar with carbon footprint associated with digital streaming	33	0.187
Had never considered environmental impact of OTT consumption	110	0.635
Surprised when informed about energy use of data centers supporting OTT platforms	133	0.762

(Table 4. Awareness Levels of Environmental Impact in OTT Consumption (N = 174))

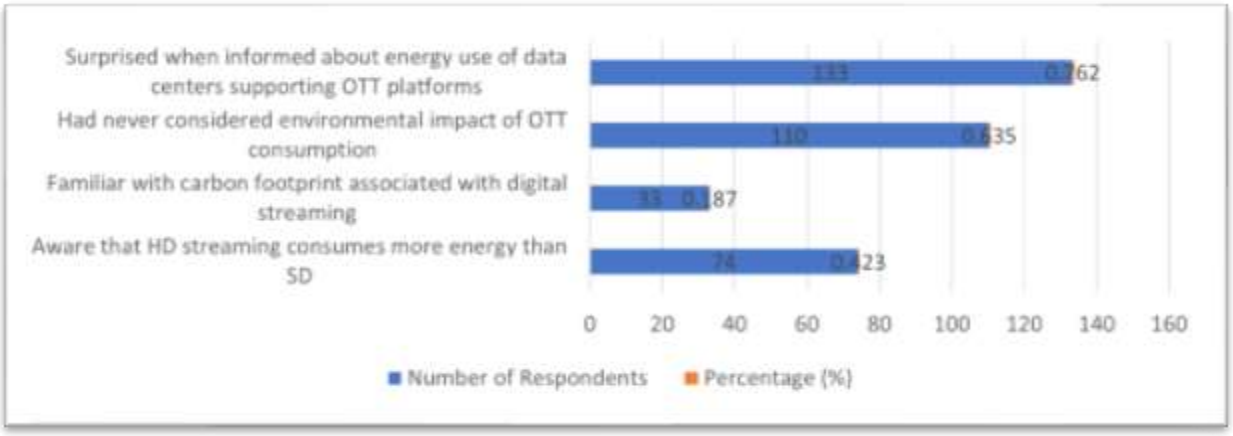

Figure-1 : Consumer awareness of Sustainability in OTT Consumption

Implications:

These results reflect a limited awareness of the environmental dimensions of OTT consumption, particularly regarding carbon footprints and data center energy use, with over three-quarters of respondents expressing surprise.

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Notably, awareness was positively correlated with education ($r = 0.68$, $p < 0.001$) and inversely correlated with age, indicating younger, more educated users are more attuned to sustainability.

The qualitative data (50 interviews, 5 focus groups) reinforced this—users often viewed streaming as "virtual" and disconnected from physical infrastructure impacts. This suggests a major opportunity for digital sustainability education embedded within OTT platforms.

Factors Influencing OTT Platform Selection:

The study employed exploratory factor analysis (EFA) to uncover the underlying dimensions that influence consumer decisions when selecting OTT platforms. The analysis yielded seven distinct factors, collectively explaining a substantial proportion of the variance in user preferences. As summarised in Table 5, the most influential criteria were content quality and diversity (28.4%) and pricing and perceived value (19.7%), followed by user experience, technical performance, social influence, sustainability practices, and brand reputation.

Sr. No.	Factor	Key Components	Variance Explained (%)
1	Content Quality & Diversity	Original content, Regional content, Genre variety, Exclusivity	28.4
2	Pricing and Value	Subscription costs, Tiering, Value perception, Free trial availability	19.7
3	User Experience	Interface design, Navigation ease, Personalization, Cross-device support	14.3
4	Technical Performance	Buffering, Quality, Downloads, Offline access	11.2
5	Social Influence	Peer recommendations, social media, Community	8.6
6	Sustainability Practices	Environmental efforts, green content, corporate responsibility	7.8
7	Brand Reputation	Trust, Longevity, Customer service	6.1

(Table 5. Key Dimensions Influencing OTT Platform Choice (Factor Analysis, N = 174)

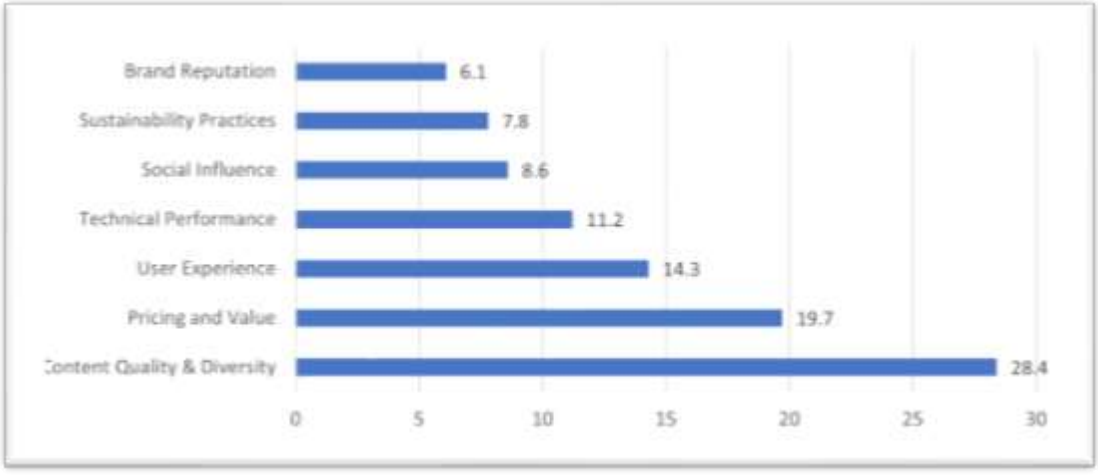

Figure-2: Factors influencing OTT Platform selection & Variance Explained (%)

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Content Quality & Diversity:

Content quality and diversity emerged as the most influential factor, explaining 28.4% of the total variance. Respondents placed high importance on platforms offering original programming, regional language options, genre flexibility, and exclusive releases. This trend was particularly strong among viewers from Ahmedabad, Surat, and Vadodara, who cited both international series and localised content as major pull factors. The availability of culturally resonant programming, particularly in Gujarati, was seen as a value-added differentiator.

Pricing and Value Perception:

The second-most critical factor was pricing and value, accounting for 19.7% of variance. This includes affordability, tiered pricing models, and the perceived value of what users receive relative to cost. Middle-income users, the dominant demographic in this study, were highly responsive to subscription flexibility and introductory offers like free trials. Respondents frequently weighed cost against perceived exclusivity and breadth of content when making platform choices.

User Experience and Technical Performance:

The user experience dimension explained 14.3% of variance, with users preferring platforms that offered easy navigation, intuitive interfaces, and device interoperability. Cross-device usability was particularly important in households where content is accessed via smartphones, smart TVs, and laptops interchangeably.

Meanwhile, technical performance (11.2%) also played a significant role. Elements such as buffering rate, download options, and offline viewing capabilities influenced user satisfaction, especially in semi-urban areas where internet consistency varies. Bhuj and Gandhidham users highlighted technical stability as a decisive factor in sustaining subscriptions.

Social Influence:

Social influence accounted for 8.6% of the variance, with peer recommendations and social media marketing playing a moderate role in shaping consumer choices. Respondents often reported discovering new platforms or shows through word of mouth or viral digital content, particularly on platforms like Instagram, YouTube, and WhatsApp groups.

Sustainability Practices:

Notably, sustainability practices, though ranked sixth, explained a meaningful 7.8% of total variance. This dimension included awareness of platform environmental policies, green content production, and corporate responsibility efforts. Its influence was most evident among younger users (18–34 years) and those with higher educational attainment—segments previously identified in Section 4.3 as being more aware of digital sustainability. Respondents from Ahmedabad and Baroda, in particular, expressed appreciation for OTT platforms that promoted eco-conscious messaging or implemented green operational practices.

This finding aligns with earlier observations that, while not yet a dominant factor, sustainability is a rising consideration in consumer decision-making. It suggests an emerging opportunity for platforms to strategically position themselves as climate-conscious brands, particularly when targeting Gen Z and urban millennials.

Brand Reputation:

Brand reputation, while explaining the lowest variance (6.1%), still carried weight among older and more risk-averse users. These individuals valued trust, longevity, and the availability of customer support, often favouring established players with a proven track record.

Relationship Between Sustainability Awareness and Platform Preferences:

Regression analysis examining the relationship between sustainability awareness and platform preferences yielded significant findings:

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1. Respondents with high sustainability awareness were 2.3 times more likely to subscribe to platforms with publicized green initiatives ($p<0.01$)
2. Among the 18-24 age group, sustainability practices ranked as the third most important factor in platform selection, after content diversity and pricing
3. Higher-income respondents showed greater willingness to pay premium prices for platforms implementing sustainable practices ($\beta=0.42$, $p<0.001$)
4. Urban respondents demonstrated stronger preference for sustainability-focused platforms compared to rural respondents ($\chi^2=18.7$, $p<0.01$)
5. Educational level was positively correlated with importance placed on sustainability in platform selection ($r=0.57$, $p<0.001$)

Engagement Patterns and Sustainability:

Analysis of engagement patterns revealed interesting relationships with sustainability awareness:

1. Users with high sustainability awareness spent an average of 22% more time on platforms with known green initiatives
2. Content with environmental themes received 31% higher completion rates among sustainability-conscious viewers
3. Platforms highlighting their sustainability practices experienced 18% lower churn rates among environmentally conscious subscribers
4. Social sharing of content was 27% higher for sustainability-themed programming among users with high environmental awareness

Willingness to Pay for Sustainable OTT Services:

This section presents the results from a contingent valuation analysis aimed at measuring consumer willingness to pay (WTP) a price premium for OTT platforms that implement verified environmental and ethical practices. The findings reveal both a growing eco-conscious consumer base and the structural barriers that hinder wider adoption of sustainable digital services.

From a total of 174 valid responses, 38.7% of users indicated a willingness to pay 5–10% more for OTT subscriptions that are environmentally responsible. While this represents a substantial minority, the majority (61.3%) remained unwilling, citing cost sensitivity and unclear value propositions as key concerns. This divergence signals that sustainable consumption in digital entertainment is at a transitional stage, with growing interest but persistent structural hesitations.

Sr. No.	Analysis Dimension	Category	Value	Key Observations
1	Overall Willingness	Willing to pay 5–10% premium	38.7% (n=67)	Over 1/3 of users show eco-conscious demand
		Not willing	61.3% (n=107)	Cost sensitivity remains dominant
2	High-WTP Demographics	Age 25–34	47.30%	Peak eco-conscious age cohort
		High-income segment	52.10%	Strong purchasing power correlation
		Postgraduates	49.80%	Education level predicts

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				sustainability adoption
		Metropolitan residents	44.20%	Urban consumers lead green adoption
3	Motivations (n=67)	Environmental concern	63.40%	Primary driver for premium acceptance
		Social responsibility	48.90%	Community-focused values matter
		Ethical consumption	42.30%	Alignment with personal ethics
		Brand value alignment	39.70%	Sustainability as brand differentiator
4	Barriers (n=107)	High existing subscription cost	72.30%	Price sensitivity as dominant obstacle
		Scepticism about impact	58.60%	Need for better impact communication
		Preference for other features	47.20%	Content/UX still prioritizes
		Lack of transparency	41.80%	Demands clearer sustainability reporting

(Table 6. Willingness to Pay for Sustainable OTT Services: Demographic Patterns and Behavioural Drivers (N=174))

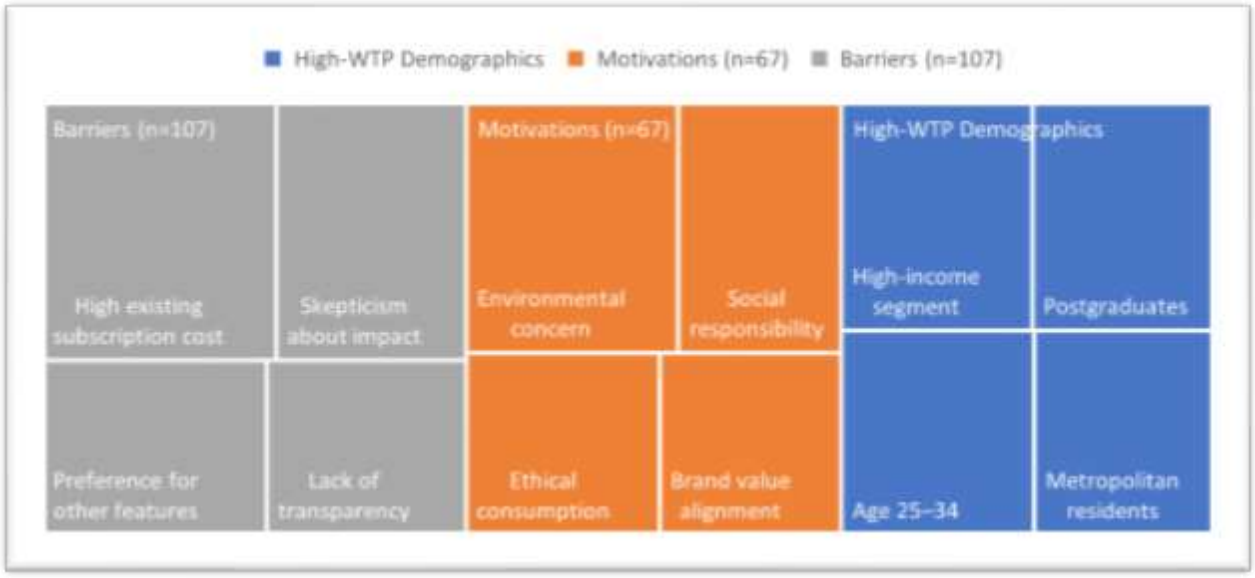

Figure-3: Willingness to Pay for Sustainable OTT Services (N=174)

DISCUSSION:

The results show that consumer willingness to support sustainable OTT platforms is rising, particularly among younger, educated, urban, and high-income segments. The 25–34 age group had the highest rate of premium acceptance (47.3%), aligning with global trends of values-based digital consumption. Likewise, users with

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postgraduate education (49.8%) and those residing in metropolitan areas (44.2%) were more open to paying extra for ethical streaming services.

This aligns with the broader patterns identified in Sections 4.3 and 4.4, where awareness and brand alignment were found to be key predictors of sustainability-oriented behaviour. Among those willing to pay more, environmental concern (63.4%), social responsibility (48.9%), and ethical alignment (42.3%) were dominant motivations. These results confirm that digital sustainability is increasingly a matter of personal and moral identity, rather than purely economic rationale.

However, the majority (61.3%) of respondents were unwilling to pay a premium, citing barriers that provide actionable insights for OTT providers:

- High existing subscription costs (72.3%) remain a critical constraint, especially among middle-income and price-sensitive users.
- Scepticism about actual impact (58.6%) indicates a lack of effective communication by platforms about their environmental efforts.
- Competing content or user experience priorities (47.2%) show that sustainability, while important, is still subordinate to perceived entertainment value.
- Lack of transparency (41.8%) about platform sustainability initiatives suggests a trust deficit that must be addressed through clear, verifiable disclosures.

These findings indicate that although there is a growing segment of eco-conscious digital consumers, OTT platforms must do more than simply position themselves as "green." They must demonstrate clear environmental action, improve transparency, and communicate sustainability in a way that resonates with consumers' values without compromising affordability and content experience.

Implications:

The emergence of a sustainability-oriented consumer cohort in Gujarat represents both a challenge and an opportunity for OTT providers. Platforms that succeed in integrating eco-friendly operations with user-centric service models may be able to capture and retain this segment—particularly among Gen Z and millennials.

To bridge the credibility and affordability gap, providers should consider:

- Low-cost "eco-mode" subscription tiers with reduced streaming resolution and carbon offset features.
- Visible sustainability labels or scorecards on content pages.
- Regular sustainability reports shared in-app or via newsletters to build trust and clarity.
- Partnerships with NGOs or environmental brands to validate platform claims and foster community-based impact.

As sustainability becomes a defining feature of digital consumption behaviour, early adoption of transparent, inclusive green strategies could position OTT platforms as leaders in responsible entertainment—not just in Gujarat, but across India.

DISCUSSION

Emerging Importance of Sustainability in OTT Selection:

The findings reveal that while sustainability is not yet the primary driver of OTT platform selection in India, its importance is growing, particularly among younger, educated, urban consumers. This trend aligns with global shifts toward conscious consumption across various product and service categories.

The relatively modest ranking of sustainability (sixth among seven factors) in platform selection reflects the current state of consumer priorities in India's OTT market. Content diversity, pricing, and user experience continue to dominate decision-making, which is consistent with previous studies (Murugan & Swetha, 2025; Yoon & Kim, 2023).

However, the significant correlation between sustainability awareness and platform preferences among specific demographic segments suggests an emerging trend that OTT providers should monitor closely. As environmental

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consciousness increases, particularly among younger consumers who represent the future subscriber base, sustainability practices may become more influential in platform selection.

Demographic Variations in Sustainability Preferences:

The pronounced demographic variations in sustainability preferences offer valuable insights for targeted marketing and content strategies. The higher prioritization of sustainability among younger, educated, urban consumers aligns with global trends in environmental consciousness.

The 18-34 age group's greater emphasis on sustainability is particularly noteworthy given that this demographic constitutes a significant portion of the OTT user base in India (38% according to Statista data cited by Coolest Gadgets, 2025). As this cohort's purchasing power increases over time, their preferences may increasingly shape market dynamics.

The urban-rural divide in sustainability preferences highlights the need for differentiated approaches in different markets. While metropolitan users show stronger preferences for sustainable platforms, the lower prioritization among rural users may reflect either different value priorities or lower awareness levels, suggesting opportunities for educational marketing in these segments.

Content Sustainability vs. Operational Sustainability:

The research distinguishes between content sustainability (environmentally-themed programming) and operational sustainability (green production practices, energy-efficient infrastructure). Both dimensions influence consumer perceptions, but in different ways.

Content sustainability appears to drive engagement metrics, with environmentally-themed content receiving higher completion rates among sustainability-conscious viewers. This suggests opportunities for platforms to develop and promote such content to attract and retain environmentally conscious subscribers.

Operational sustainability, while less visible to consumers, influences brand perception and loyalty when effectively communicated. The lower churn rates among environmentally conscious subscribers for platforms highlighting their sustainability practices indicate that operational sustainability can serve as a retention tool.

Willingness to Pay Premium for Sustainable Services:

38.7% of respondents are open to paying more for sustainable OTT services, offering platforms a chance to stand out and boost revenue, especially among eco-aware, higher-income users. However, with 61.3% still hesitant, platforms must build trust through transparent, certified sustainability efforts to justify the premium.

Implications for OTT Platform Strategies:

The findings suggest several strategic implications for OTT platforms operating in India:

1. Segmented Sustainability Messaging: Platforms should tailor sustainability messaging to different demographic segments, with stronger emphasis in communications targeting younger, educated, urban consumers.
2. Transparent Sustainability Reporting: To address skepticism, platforms should adopt transparent reporting of environmental impacts and sustainability initiatives, potentially leveraging third-party certification.
3. Dual Sustainability Approach: Platforms should pursue both content sustainability (environmental programming) and operational sustainability (green production, energy efficiency) to maximize appeal to environmentally conscious consumers.
4. Sustainability as Differentiation: In India's increasingly competitive OTT market, sustainability practices can serve as meaningful differentiators, particularly for platforms targeting premium segments willing to pay for aligned values.
5. Educational Marketing: Given the low awareness of streaming's environmental impact (63.5% had never considered it), platforms have an opportunity to educate consumers while positioning themselves as responsible industry leaders.

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Regulatory and Policy Implications:

The research findings also have implications for regulatory frameworks and industry policies:

1. Standardized Sustainability Metrics: The industry would benefit from standardized metrics for measuring and reporting environmental impacts of OTT operations, enabling meaningful comparisons between platforms.
2. Incentive Structures: Government policies could provide incentives (tax benefits, grants) for OTT platforms implementing verifiable sustainability practices, similar to incentives in other sectors.
3. Consumer Education: Regulatory bodies could mandate disclosure of environmental impacts of different streaming qualities, enabling informed consumer choices.
4. Industry Collaboration: The findings suggest value in industry-wide collaboration on sustainability standards and practices, potentially through existing industry associations.

CONCLUSION

This empirical analysis of sustainable consumer preferences and OTT platform choices in India reveals a complex landscape where traditional factors like content and pricing still dominate selection decisions, but sustainability considerations are emerging as increasingly important, particularly among younger, educated, urban consumers.

The research identifies a significant opportunity for OTT platforms to differentiate themselves through sustainable practices, both in content production and operational infrastructure. With 38.7% of consumers willing to pay premium prices for sustainable services, platforms can potentially align environmental responsibility with business growth.

The pronounced demographic variations in sustainability preferences highlight the need for segmented approaches, with stronger sustainability messaging for younger audiences and educational marketing for segments with lower awareness. The urban-rural divide in sustainability preferences suggests differentiated strategies for different geographic markets.

As India's OTT market continues to mature and competition intensifies, sustainability practices may evolve from nice-to-have features to essential components of platform strategy. Platforms that proactively embrace sustainable practices and effectively communicate their initiatives stand to gain competitive advantages in brand perception, consumer loyalty, and potentially premium pricing.

For the industry as a whole, the findings suggest value in collaborative approaches to sustainability standards, transparent reporting mechanisms, and consumer education about the environmental impacts of digital entertainment consumption. Such collective efforts could enhance the sustainability of the entire ecosystem while meeting evolving consumer expectations.

In conclusion, while content remains king in India's OTT landscape, sustainability is emerging as a powerful queen that may increasingly influence the competitive dynamics of this rapidly evolving market.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Limitations:

This study has a few limitations. Since the data is self-reported, there's a chance of social desirability bias, especially in responses about environmental concerns. The sample leaned more toward urban users, which may not fully reflect rural perspectives. The study looked at general OTT trends, so differences between individual platforms might have been missed. Being cross-sectional, it only captures user preferences at one point in time, and estimating the true environmental impact of streaming remains a challenge due to limited precise data.

Future Research Directions

Future research can address these gaps by tracking changes over time through longitudinal studies and exploring differences between specific OTT platforms. It would be useful to apply behavioural economics to see how sustainability cues influence real choices, and to compare user behaviour across countries. Experimental studies

could also help reveal the gap between what users say and what they actually do. Lastly, better tools are needed to measure the environmental footprint of OTT usage more accurately in the Indian context.

REFRENCES

[1] Allam, R., & Chan-Olmsted, S. (2020). The development of video streaming industry in Egypt: Examining its market environment and business model. Journal of Media Business Studies, 18(4), 285–303. https://doi.org/10.1080/16522354.2020.1853436

[2] Bhattacharyya, S. S., Goswami, S., Mehta, R., & Nayak, B. (2022). Examining the factors influencing adoption of over the top (OTT) services among Indian consumers. Journal of Science and Technology Policy Management, 13(3), 652–682. https://doi.org/10.1108/JSTPM-09-2020-0135

[3] Chan, R. Y., et al. (2002). Explaining green purchasing behavior: A cross-cultural study on American and Chinese consumers. Journal of International Consumer Marketing.

[4] Chakraborty, D., Siddiqui, M., Siddiqui, A., Paul, J., Dash, G., & Dal Mas, F. (2023). Consumption values and trust: Repurchase intention of OTT platforms. Journal of Retailing and Consumer Services, 74, 103405. https://doi.org/10.1016/j.jretconser.2023.103405

[5] Chakraborty, D., Siddiqui, M., Siddiqui, A., Paul, J., Dash, G., & Dal Mas, F. (2023). Watching is valuable: Consumer views—Content consumption on OTT platforms. Journal of Retailing and Consumer Services, 70, 103148. https://doi.org/10.1016/j.jretconser.2022.103148

[6] Coolest Gadgets. (2025). Indian OTT platforms statistics by demographics, marketing, regulations, revenue and subscription rate. Retrieved from https://www.coolest-gadgets.com/indian-ott-platforms-statistics/

[7] GrowthX. (2024, December 26). India has 500M+ OTT users in 2024. With 34% user penetration, the rise of… | GrowthX® [Online forum post]. https://www.linkedin.com/posts/growthxclub_india-has-500m-ott-users-in-2024-with-activity-7277969378178936832-vQ9y/

[8] Gupta, G., & Singharia, K. (2021). Consumption of OTT media streaming in COVID-19 lockdown: Insights from PLS analysis. Vision, 25(1), 36–46. https://doi.org/10.1177/0972262921989118

[9] Istrate, R., Tulus, V., Grass, R. N., Vanbever, L., Stark, W. J., & Guillén-Gosálbez, G. (2024). The environmental sustainability of digital content consumption. Nature Communications, 15(1), 3724.

[10] Kumar, A., Malhotra, P., & Yadav, A. (2021). Market research and analytics on rise of OTT platforms: A study of consumer behaviour. International Journal of Advances in Engineering and Management, 3(12), 145–152. https://ijaem.net/issue_dcp/Market%20Research%20and%20Analytics%20on%20Rise%20of%20OTT%20Platforms%20A%20Study%20of%20Consumer%20Behaviour.pdf

[11] Kumar, K., Krishna, V. R., Govindaraj, M., Pawar, V., Sathyakala, S., & Viswanathan, R. (2025). Characteristics determining customer's preferences for OTT video streaming: A multivariate analysis. Entertainment Computing, 52, 100746.

[12] Kumari, T. (2020). A study on growth of over the top (OTT) video services in India. International Journal of Latest Research in Humanities and Social Science (IJLRHSS), 3(9), 68–73.

[13] Kuntsman, A., & Rattle, I. (2019). Towards a paradigmatic shift in sustainability studies: A systematic review of peer-reviewed literature and future agenda setting to consider environmental (un)sustainability of digital communication. Environmental Communication, 13(5), 567–581.

[14] Nguyen, N., & Johnson, L. W. (2020). Consumer behaviour and environmental sustainability. Journal of Consumer Behaviour, 19(6), 539–541.

[15] Nijhawan, G. S., & Dahiya, S. (2020). Role of COVID as a catalyst in increasing adoption of OTTs in India: A study of evolving consumer consumption patterns and future business scope. Journal of Content, Community and Communication, 12(6), 298–311.

[16] Patnaik, R., Patra, S. K., & Mahapatra, D. M. (2024). Adoption and challenges underlying OTT platform in India during pandemic. FIIB Business Review. https://doi.org/10.1177/23197145221101676

[17] Sadana, M., & Sharma, D. (2021). How OTT platforms engage young consumers over traditional pay television: Gamification and preferences. Young Consumers, 22(4), 515–534. https://doi.org/10.1108/YC-10-2020-1231

[18] Seyfi, S., Hall, C. M., Vo-Thanh, T., & Zaman, M. (2023). How does digital media engagement influence sustainability-driven political consumerism among Gen Z tourists? Journal of Sustainable Tourism, 31(11), 2441–2459.

Research Article

[19] Sharma, A., & Harsora, H. (2023). A study on preferences of consumers towards international OTT platforms and sustainability strategy in Indian market. ResearchGate. https://www.researchgate.net/publication/367539567

[20] Sharma, K., & Lulandala, E. E. (2023). OTT platforms resilience to COVID-19–A study of business strategies and consumer media consumption in India. International Journal of Organizational Analysis, 31(1), 63–90. https://doi.org/10.1108/IJOA-06-2021-2816

[21] Tyagi, P., & Kumar, N. (2024). Rise of OTT platforms in India: A case study of monetisation models & regulatory concerns. Global Media Journal, 22(68), 1–7.

[22] Unal, U., & Tascioglu, M. (2022). Sustainable, therefore reputable: Linking sustainability, reputation, and consumer behaviour. Marketing Intelligence & Planning, 40(4), 497–512. https://doi.org/10.1108/MIP-03-2022-0102

[23] United Nations Conference on Trade and Development. (2024). Digital Economy Report 2024. United Nations. https://unctad.org/system/files/official-document/der2024_en.pdf

[24] Valecha, P., & Jesudason, R. J. (2020). Attitudes and beliefs towards Indian OTT advertising: A structural equation modelling analysis. Journal of Content, Community and Communication, 12(6), 131–145. https://www.amity.edu/gwalior/jccc/pdf/paper%2016%20-%20jccc%2019_10%20compiled.pdf

[25] Yadav, M., & Baral, S. K. (2024). Post-pandemic OTT media hegemony in India: A socio-economic perspective. In Changing Competitive Business Dynamics Through Sustainable Big Data Analysis (pp. 56–69). Bentham Science Publishers.

[26] Yoon, J. H., & Kim, H. K. (2023). Why do consumers continue to use OTT services? Electronic Commerce Research and Applications, 58, 101215.